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ADVENTURES IN AFRICA

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UNDER THE BRITISH, BELGIAN, AND PORTUGUESE FLAGS

By J. B. THORNHILL

AUTHOR OF
"BRITISH COLUMBIA IN THE MAKING"

WITH MAP, DIAGRAMS, INDEX AND GLOSSARY

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ABBREVIATIONS USED FOR COMMERCIAL COMPANIES, TROOPS, ETC.

C.S.K.	*Comité Spécial du Katanga.* / Special Committee of Katanga.
T.C.L.	Tanganyika Company. / Tanganyika Concessions Ltd.
U.M.H.K.	*Union Minière du Haut Katang* / Consolidated Mining Company.
B.N.P.	Barotsiland Native Police.
B.S.A.C.	British South African Company. / Chartered Company.
The Lakes	African Lakes Corporation.
N.C.C.	Northern Copper Company.
N.E.R.	North-Eastern Rhodesia.
N.W.R.	North-Western Rhodesia.

INTRODUCTION

THIS work is an attempt, not only to describe the life of a pioneer in that portion of South Central Africa known as Katanga (a part of the Congo State which since 1908 has been administered as a Belgian colony), but it is also intended to give a concrete idea of the exploitation of that wonderful region of which Katanga forms a most important part on account of its richness in base minerals. This region is the country of the Congo-Zambezi Watershed along which the writer hopes will run the first trans-African railway.

The area of the conventional basin of the Congo is 800,000 square miles, and by the late King Leopold it was conceded to eight different groups in finance. The Katanga Company promoted by one of these groups secured the South-Eastern portion and part of the southern portion adjoining our territory of Northern Rhodesia. Owing to the bankruptcy of the Katanga Company, the Tanganyika Concessions undertook to develop Katanga on behalf of the Special Committee of Katanga, a body subject then to existing Congo Government. Owing to financial and other reasons the Consolidated Mining Company of the Upper Katanga (Union Minière du Haut Katanga) was formed in Brussels, in the year 1906, in order to

amalgamate the Katanga and Tanganyika Companies. The Tanganyika Concessions are, therefore, largely dependent on, and interested in, the Consolidated Mining Company, which is apparently now in a prosperous condition, and the following pages portray, with one notable exception, the experiences and adventures of the author while in the employment of the Tanganyika Concessions and their allied interests.

This exception is the chapter which describes the system of indentured labour in the Portuguese territory of Angola. This system has had in the past, and until radical reforms are effected must continue to exert in the future, a very important influence on the supply of labour for concessionary companies operating in Congo territory. Besides having a direct bearing upon the prospects of these companies, the subject of Portuguese indentured labour is one which has aroused general interest abroad, and very special interest in this country, where information at first hand by unprejudiced observers has been eagerly sought.

The name of a great Englishman is mentioned frequently—that of Mr. George Grey, whose untimely death left a gap difficult indeed to fill. He was a brother of Sir Edward Grey, the Secretary of State for Foreign Affairs, and was, for a considerable period, the chief representative of the Tanganyika Concessions in the Congo State where his extraordinary energy and abilities were of invaluable service to that company.

The great Katanga Copper Belt, to which allusion is so often made, is part, and by no means the

richest part, of the extraordinarily rich metalliferous property worked by the Tanganyika Concessions in conjunction with the Consolidated Mining Company. Although it is still only partially developed, the annual output of copper is increasing rapidly, and it may be no exaggeration to say that, in the not distant future, when the many problems of development are solved, the Katanga Copper Belt will be one of the controlling factors in the copper supply of the world. Possibly owing to its central position in the Congo-Zambezi Watershed region, Katanga may become the centre of enterprise in the making and development of the Highlands of South Central Africa, a work which calls for the co-operation of capitalists, politicians, and adventurers alike.

Generally speaking, the actual and potential resources of the region, in which the author laboured for a considerable time, can only be described as enormous, and the efforts made to develop them are faithfully portrayed in this work, which includes also sketches of various native races and a description of that terrible scourge, sleeping-sickness. The writer, who disclaims literary ability, begs for the kind indulgence of critics, and hopes that his words may prove of real use and interest to varied classes of readers.

ADVENTURES IN AFRICA

CHAPTER I

My Journey to Katanga

Just after the rainy season of 1905 had begun, I paid a short visit to Bulawayo. The visit was partly on pleasure and partly on business, for I had decided that, unless I could see some better future than was offered by my life in Southern Rhodesia, I would give up Africa for good and all.

Before returning to my work I called on the agent of the Tanganyika Concessions, an English company which has played a great part for good in the development of Central Africa—the part then coloured white on most maps, as being unexplored. The agent told me that George Grey, who was managing the business of the Company in the Southern Congo, had written, two months previously, asking him to engage a French secretary. Not being able to find a suitable man, the agent had suggested that Grey should write home to the London office for one. Chance is a fine thing, and here seemed a real chance. So I decided, in spite of the agent's advice, to start as soon as I possibly could for Katanga—then a six-hundred-mile walk from the railhead of

the so-called Cape to Cairo Railway. "The most inaccessible spot in Africa," Grey had described his headquarters in a letter to me two years previously. My decision was not an unreasonable one, for four years before I had tried to get in with Grey, not only on account of what I had heard about his country, but because the late Lord Northbrook, a man who measured every word he uttered, had said that "George Grey was the greatest Englishman of his day."

It took me four days to return to my work and get clear of it, and then I had to take another trip to say good-bye to some old friends. A week later I was back in Bulawayo. During the day I hustled round, bought a second-hand 8-millimetre Mauser with 300 rounds of ammunition (it was not a good purchase), 200 shot cartridges (I had a shot-gun already), also a bell tent and cooking pots, and stores sufficient to take me up north and bring me back in the event of my not securing work. These purchases and my ticket to the Victoria Falls cost me in all £23, leaving me with exactly £30 cash in the world. I changed my money into gold and put it into a leather pouch studded with brass nails—they sell them at half a crown apiece in Africa. This armlet I carried on my person, strapped on my left arm.

The same night—it was a Saturday—I left Bulawayo by the Zambezi express for the north. Twenty-two hours later we arrived at the Falls.

The bridge had been officially opened about three months previously by the President of the British Association, who that year had their meet-

ing in Africa. There were still over half a million rivets to be put in, so our train did not cross it—the heaviest load permitted being a light engine drawing two trucks of rails at a time for the construction going on north. Once the driver of the light engine put it off the rails on the bridge. Luckily he was able to pull up before he reached the flimsy iron railings at the side. The cause of the engine jumping the rails was a leopard which it had run over. All sorts of things passed across the bridge at times, from alligators to big buck.

The bridge was one of the dreams of that remarkable man Cecil Rhodes, a dream that came true, but, unfortunately, it is not what he meant it to be. Half a mile lower down the gorge a bridge could have been built which would have been half the span, and have cost a third of the price, but that did not suit Cecil Rhodes. He wanted the bridge made so that it would be washed by the spray from the Falls, and at the same time give a view of the mile and a half expanse of the broad Zambezi, which falls nearly 500 feet into a pool of seething foam, and narrows into a gorge only 70 yards wide below. The bridge unfortunately is not flush with the level of the Falls. The engineers who designed it calculated that they would find solid rock for the abutments at a certain depth, and made their designs accordingly. When they came to dig the foundations they could not get solid rock till they had gone down 30 feet deeper than their original estimate. In consequence the bridge is approached by bad and dangerous gradients on each bank, and no

view of the river above the Falls is obtainable from the train.

In the building of the Firth of Forth Bridge more than fifty men were killed. The builders of the Zambezi bridge were really lucky; the building of the bridge only cost two lives, although there were seven hundred white men and more than a thousand natives employed on it. Of the two lives lost one was a native and the other a white man. The former fell off the bridge into the gorge and was never heard of again. The white man had a girder lowered on to him. He was too badly crushed to be moved, and his death was only a matter of a few hours. His request to the doctor was, "Send me down one of my pals and a bottle of whisky"—which was complied with. While the bridge was being built, the cantilevers were held up by stout wire hawsers. One day the north cantilever suddenly slipped. Every one dropped their tools and raced for the shore. They had about 60 yards to run. The engineer stood with his arms folded and shouted, "Don't run; if the bridge is going, it will go before you can reach the bank!" The tip of the cantilever stopped after falling about 10 feet, the hawsers having adjusted themselves.

Although the bridge had been opened more than three months before I saw it, it was only being used for light traffic, and the three trolleys which met my train were wanted to take the mails across, so I had my loads carried down to the river and distributed in two Canadian canoes. We wound our way through the thousand and one islands that stud the Zambezi above the Falls,

following a course which the Government had marked out by a series of white iron stanchions planted on rocks, and reached the landing-stage on the north bank just as the sun was setting. The evening was calm and still, and, learning that there were no "spoilt" crocodiles near the landing-stage, I took off my clothes and had a real good swim in the cool Zambezi, which was most refreshing after the dust and heat of the railway journey. I persuaded the paddlers of the canoes to carry up my kit to the contractors' depôt, which was about a mile from the river. There I ran into a couple of Yao soldiers of the Barotsiland Native Police, who helped me to pitch my tent and make myself comfortable. It was pitch dark as, knee-deep in sand, I ploughed my way on the road (save the mark!) to Livingstone. I got a good meal at the only inn in the place, and then went back to my camp and turned in.

Next morning while going through my loads I found I had accidentally taken a case of liquor, belonging to some one else, in place of a case of stores, so I borrowed a trolley and two or three natives and went down the railway to the bridge and across it. I recovered my own case of stores and gave the other case back to the station-master at the Victoria Falls station. Coming back, I stopped the trolley on the bridge and walked into the dense jungle of the rain forest, the bit of ground watered by the spray of the Falls. Here the vegetation was rank and tropical, and entirely different from the open forest and low scrub country that surrounded it. I failed to find the tree, now zealously guarded, where

David Livingstone had carved his name some fifty years before. On my return to the bridge I had a good look at the Falls, and I must own to being disappointed. I think it was the want of foreground. Power plants, however ugly down in the gorge, would really help to enhance the grandeur of the Falls. Standing on the bridge, I could not realise its height. I picked up a bolt and dropped it over, counting thirteen seconds before it reached the water (ten and two-thirds seconds is right), but still the height appeared nothing to me. The water in the gorge below seemed like a little ditch which one could almost jump across, although I knew it to be 70 yards wide.

The bridge impressed me very much, but it would have been better to have painted it a brilliant red or a gaudy purple. Ironclad grey did not at all harmonise with the tropical rain forest and its subtropical surroundings.

I trolleyed back to the contractors' depôt and got to Livingstone in time for luncheon.

After luncheon I called on Sykes, the District Commissioner. His house commanded a splendid view of the broad Zambezi, which terminated in a great cone of mist, through which ran part of the arc of a massive rainbow. One could just hear a faint whisper of the "Amanzi a tunya" ("the water that talks"), as the natives call the Falls. I spent two hours or more getting information of routes to Katanga. One of the routes suggested by Sykes was decidedly interesting, but the possibilities of delay and the uncertainty of the expenses put me off.

A few days before my visit a gentleman in a state of destitution had called on Sykes and asked him to telegraph to Cox's Bank for funds. He had been wandering round Central Africa, and, 60 miles south of Ruwe, the local centre of the western end of the Great Copper Belt over the Congo border, he had purchased two canoes from the natives. Engaging paddlers, he had come down the Kabompo River almost from its source to its junction with the Zambezi, and then down the Zambezi without a single mishap until he arrived about 8 miles above the Falls. Here there is a little rapid, and, not knowing the right passage through it, he had had the misfortune to have both his canoes upset and lose everything he had in the world. Sykes suggested that I should take this route. Although I did not take it, I now feel that it was a piece of bad luck that the Tanganyika Company had not investigated this route six years earlier, for, if they had, I feel certain that they would have put river steamers to run their goods up that way, and thus saved themselves the thousands of pounds they expended on human transport. The real fact is that development follows easy money and the leadership and plausibility of one or more individuals instead of being based on true economics.

Sykes had earned a lot of newspaper opprobrium by insisting that Livingstone, which is now the capital of Northern Rhodesia, should be built on the sand belt. The British South African Company would not have it near the Falls, and all around was very unhealthy. The good health

enjoyed by the people of Livingstone thoroughly justified Sykes's choice. He also had some very bad luck. Like all sound men on the advance, he was very strong on the subject of upholding the European prestige. A Jew trader, in order to get favours from Lewanika, the king of the Barotsi nation, prostrated himself on the ground and clapped his hands—the native form of salutation—to one of Lewanika's sons. Sykes took absolutely the right course, arrested the Jew boy, and deported him over the border. A skilful lawyer took up the case and succeeded, I understand, in getting a tidy penny out of both Sykes and the Chartered Company.

I paid several other visits in Livingstone, but none which gave me such amusement and instruction as my call on Sykes. I heard stories galore of Sykes's wit, one of which is well worth repeating. Before telling it, I mention that, in South African parlance, "skoff" means food or "to eat." Sykes used to have Sunday morning breakfast parties, and at one of these a wandering missionary appeared, who held a service. Sykes, on inviting his friends to remain, said, "Gentlemen, you came to scoff—and you must remain to pray."

That evening there was a construction train going north, so I planked my kit on an open truck of rails, and bargained with one of the boys on the train to keep awake all night and see that no sparks—for the engine was burning wood—lighted on myself or my baggage. I then made myself comfortable, turned in, and went to sleep. The fare for the 80 odd miles was £3, 9s., and I also had to pay 8s. for excess baggage.

The construction train reached Kalomo at four o'clock the next morning. Here I left the train since my route lay in a different direction. There were two Yao soldiers of the Barotsiland Police waiting for a down train at the siding. They helped me to pitch my tent and fix up my bed, table, and chair. As I learnt that the down train would not arrive until the afternoon, I promised the soldiers a little present if they would look after my things until I came back, and then I drove with Zeederberg's man to the township. This was 3 miles away, as it would have cost too much money, in a country where railways had to be built cheaply, to bring the railway through the town. As Kalomo is now only a mere name, there is no use giving a description of it. At that time it was quite an important place, as it was then the seat of Government of North-Western Rhodesia. I had a bath at the only hotel and breakfast. Then I borrowed a horse—it was a racehorse in training, and a really good beast—and started off visiting.

First I called on the Secretary for Native Affairs, who was, like myself, an East Anglian. He very kindly sent runners up the road to the different Government posts, and arranged to have carriers in waiting for me, and, further, he took ten natives off his own building work and lent them to me for the first stage of my journey. I then rode off and called on the Administrator, who received me very kindly. A few years before he had been a serjeant in one of the mounted police corps down south. Joining the advance, his popularity, his reputation for fast travelling,

and his prowess as a big game hunter had won him the position he then held.

Some of the Administrator's handiwork is to be seen in the Natural History Museum at South Kensington, which possesses the only complete specimen of the white rhinoceros. A few years ago the white rhinoceros was common throughout Africa, but its tameness and stupidity led to its complete extinction, and Bob Coryndon, the Administrator, had been lucky enough to secure the last specimen, for which he received a thousand pounds. I had no real business with Coryndon beyond making his formal acquaintance, and after a short discussion on the art of living in the tropics, he asked me to remember him kindly to his friends in the Tanganyika Concessions, and hoped that my venture in quest of fortune would be rewarded with success.

I returned the horse, was driven over to the camp of the B.N.P., where I had the good luck to find there two Yaos, the nephews of one of the native serjeants. I engaged them as my servants. They had horrible long-sounding names, so I renamed them, calling my personal servant Musa and my cook Alhamid. I have a strong partiality for Yaos, not only on account of their being Mohammedans, but because I remember the splendid behaviour of the two Yao Companies of the 2nd Battalion of the King's African Rifles in the charge at Obasu in the Ashanti War of 1900. The Yaos are Mohammedans on account of their contact with the Arabs, who always employed them in their slave-raiding expeditions south of the equator. I strongly recommend any one going to Central

Africa, especially a man who takes a white woman with him, to have Yao servants. I obtained a couple of haversacks, a few pull-throughs for my rifle, and one or two odds and ends from the police stores. As I had no means of conveyance I walked back from the B.N.P. camp. At Kalomo I borrowed a bicycle, without permission (it happened to be the Administrator's), from outside the Club, and made my ten carriers run behind me to the railway station. I struck my tent and carried everything back to the town, where I made up my loads at the hotel—none of them weighing over 52 lb. Except my guns and what my servants were carrying I had exactly 469 lbs. I bought just over half a sack of grain for my carriers at the rate of 37s. 6d. a sack of 200 lbs. It was nearly nine o'clock by the time I had finished everything, and I then hurried over to the house of the Secretary for Native Affairs, who had invited me to dine and sleep. And now the interesting part of my story begins.

Before sunrise next morning I had breakfasted and moved off on my journey north. Marching in Africa in the rainy season is never a pleasure; the grass is wet in the morning, there is always heavy rain in the afternoon and at night, generally accompanied by violent thunderstorms, and shooting means real hard work, for the game are out of the vleys and dambos, as the treeless patches in the open forest country are called. That day I made about sixteen miles and camped about midday. The next day I again started before daylight, and, as the weather promised to

be fine, I trekked on until later in the afternoon when I had marched 22 miles. I had the good fortune to encounter at my camping-ground a European, who gave me a really good dinner, and who also presented me with several tins of luxuries that my small means had prevented me from purchasing. He had between two and three hundred "boys" with him whom he had recruited for the railway construction. He told me of the starving state of the country up north, and that he had fed his people all the way down on meat, and that, on the day before, he had shot eleven blue wildebeeste. During the next two days I trekked through the Batoka country without encountering anything of interest. One evening while out shooting I came across a cow hartebeeste which was quite lame from an old wound inflicted by a small-bore rifle. I was able to walk to within 20 yards of it, thus getting an easy shot and plenty of meat. The next evening I ran into a mob of roan, one of which I hit badly. I followed blood spoor for close on three miles and then, seeing darkness and a rainstorm coming on, I regretfully had to desist, for I hate leaving a wounded buck to perish. On my way back to my camp, which I reached at seven o'clock, I heard a lion roar for the first time north of the Zambezi. On the fifth day of my journey I reached the Mashukulumbwe country, an agreeable change after the monotony of the forest.

In Southern Rhodesia we knew the Mashukulumbwe under the generic term of "Zambezi boys," and we also knew their weakness for killing people. There is some excuse for this amiable

trait. No Mashukulumbwe maiden will look at a lover until she knows he has killed a man. Almost every hut in their well-built kraals had one or more Kaffir pots on top of it, each pot indicating an enemy put out of the way. The Mashukulumbwe are great cattle owners, splendid fishermen, and mighty hunters. At the time of my arrival they were just shifting from their winter residences to their summer quarters. Their winter residences—winter (our summer) is the dry season in South Central Africa—were on the huge expanse of flats that border the Kafue (the Zambezi's largest tributary) for 20 miles south of the railway crossing and for 70 miles north of it, a country teeming with all kinds of game, and offering bird shooting of every description. The Duke of Westminster, since my time, has started a large cotton plantation on this rich alluvial land, and he is bound to make a very good thing out of it.

The Mashukulumbwe are unique amongst the inhabitants of Northern Rhodesia, being the only Negroes amongst the hundred and one Bantu races that, with a few bushmen, form the native population of the great sub-continent of South Africa. Their language is radically different from any Bantu language. Although I can always make myself understood by Bantus, as I have a rough working knowledge of two or three of their languages, all of which have more or less the same roots, I could not get any idea of what the Mashukulumbwe were talking about. The men—not the women—have a curious way of doing the hair. They rake up all the hair at the back, and

work it up into a conical-shaped dome, giving them a most quaint appearance. They always have been the most warlike race in North-Western Rhodesia, and their turbulence together with their wealth in cattle, on which many Europeans are casting covetous eyes, means that some day, after they have overcome their petty local quarrels between villages, they will organise and will put up a big fight against the Administration.

Just before arriving at the Government post in the Mashukulumbwe country I knocked over a couple of spur-winged geese which rose with a dense gaggle from a pan beside the road. There were any amount of oriby about. The oriby is a small reddish buck about the size of a goat with straight upstanding horns about 6 inches long. Oriby are particularly good eating, as are most small buck, and are every bit as good as reedbuck, duiker, klipspringer, and stenbuck. As the Government buildings at Nemwala came in sight I shot an oriby with particularly good horns—that is, good for an oriby. The horns were $5\frac{3}{4}$ inches. I thought them worth keeping, and so I carried them into Nemwala.

Andrew Dale, a former Native Commissioner of the Wankie district down south, had been given the not exactly enviable job of ruling the Mashukulumbwes. On his arrival, Dale chose Nemwala for his headquarters. It is one of the finest sites I have seen. Standing on a little knoll of open ground about 50 or 60 feet above the flood plain of Kafue, it gives a view for miles over the rich and open grass marshes which border that great river. It is about 5 miles from the Kafue, and a

natural canal running north-west and south-east connects the little lagoon below the camp with the Kafue. The main Government road up north, that one day may be carried up to Lake Tanganyika, passes within 2 miles of the post. To the west is the interminable open forest of South Central Africa. The buildings, which included three European residences, a court-house, post office, jail, and quarters for the native messengers and the small detachment of B.N.P., were placed round a great square of about 4 acres of white sand, and were constructed of poles mudded over with clay with high-pitched thatched roofs. The soil all round the knoll was very porous, and ideal for a subtropical Government post. From Nemwala the Kafue is navigable for 150 miles to the south and 60 to the north. The bridge of the so-called Cape to Cairo Railway has 13 spans of 100 feet each, and is 40 miles south of Nemwala.

Less than a year previously, about the time of Dale's arrival, the Government had been compelled to send troops up to catch and hang a few Mashukulumbwe for murdering foreign natives travelling through their country. This was a very forcible means of changing the habits of the Mushukulumbwe love-lorn swains, who, as I have said, had no hopes of winning a bride without a pot to adorn the top of her future residence.

What with hippos and the Mashukulumbwe, Dale had passed through some thrilling times. On one of his journeys through the Kafue flats, some way away from his headquarters, the Mashukulumbwes had turned on him. He had

the good fortune to beat his retreat into the rushes that fringe the banks of the river. The Mashukulumbwe feared to follow him, for Dale was a pretty sure shot with the rifle. For two nights and three days, often up to their waists in water, and forcing their way through the rushes, half as tall again as themselves, Dale and his unarmed messengers gradually worked their way home with the Mashukulumbwes keeping on the grass of the flats outside, and waiting on their chance to kill him when he broke out. Dale ruled them like a father, and at the time of my arrival not only did he speak their language (a difficult one) fluently, but also he had completely won their confidence. He did all he could to prevent them impoverishing themselves, by discouraging them from selling their cattle for the paltry sums in cash and the tawdry trade goods the enterprising white trader offered. At the time of my arrival Mashukulumbwes were trooping in in their hundreds and paying hut tax without any demur, as if it were a recognised institution and not *the first time it had been imposed.*

To celebrate the successful collection of the hut tax Dale boldly invited practically the whole of the Mashukulumbwe nation to a great feast, sports, and beer-drink. Counting women, he must have had close on 2000 natives in his camp. I thought this experiment rather a risky one considering the reputation of the Mashukulumbwe, but I was glad to have the chance of some fun for Christmas, and I jumped at Dale's invitation to spend it with him, especially as, for other reasons, voluntary carriers at that time were

rather hard to get, and I most strongly object to impressed labour.

On the first evening of my stay with Dale, after my return from shooting, an aged Barotsi, with a loin-cloth round his waist, a billycock hat on his head, and wearing a mouldy green swallow-tailed coat that had once been black, after making the proper salutations, entered the hut which I had been lent, and laid a freshly shot spur-winged goose at my feet. Thinking he was Dale's shooting boy and not wanting to be discourteous, I accepted the goose, although I did not want it. I thanked the "boy," gave him a small present, and sent him away. That evening I recounted the episode at dinner, and to my surprise was told that my visitor was King Lewanika's Resident Commissioner at Dale's court.

North-Western Rhodesia and part of North-Eastern Rhodesia do not belong to the Chartered Company in the same way as do their other territories, won partly by treaty and partly by conquest, but form a part of the British sphere of influence, roughly delimited by a former international European conference. The Chartered Company are merely administering this territory for the British Foreign Office. Lewanika, the King of the Barotsis, claimed this territory as feudatory to him because he and his predecessors had raided it for slaves and wives, and at the same time had protected it from other raiders. The Barotsis always left the Mashukulumbwe alone because the Mashukulumbwes could give too good an account of themselves. The Chartered Company could not very well collect

hut tax in a country which was technically independent without coming to some understanding with Lewanika, whose overlordship over all North-Western Rhodesia was, therefore, recognised by the Chartered Company, which started to collect hut tax in Lewanika's own kingdom of Barotsiland as well as in the rest of the country. Lewanika agreed to accept 10 per cent. of the gross amount recovered. To see that he was not defrauded he kept a Resident Commissioner—none of them could read or write—at every District Commissioner's headquarters.

I put in the six days before Christmas very comfortably. Both morning and afternoon I went out on the flats and shot puku, the small marsh-buck which run in their hundreds on both sides of the Kafue. I also shot spur-winged geese, duck, teal, waders of all descriptions, and once I got a solitary snipe, the first I had ever shot in Africa. As Christmas drew near, visitors from outside began arriving. The District Commissioner of Kaiyungu, and his clerk, an ex-artillery officer, trekked in from the north-west. The manager of the Northern Copper Company, who came of a well-known South African missionary family, a very pleasant Irishman, who was in charge of the ferry across the Kafue, and a Jew trader of the neighbourhood, brought up our numbers to eight.

The sports on Christmas Day opened with a 10-furlong foot race. The 400 starters, a yelling, shrieking crowd of Mashukulumbwe, all bunched up together and, led by four Europeans on horseback, headed straight for the winning-post at

which I was standing as judge. The winner was one of the Government messengers, and I believe if he could have been got to Europe he would have done wonders. For he had about half a mile of wire wound round each leg, and in the middle of the race the wire round his right leg came undone, bringing him down an awful cropper. Gathering up the loose wire in his hand, and with a lot still round his leg, he overtook the rest of the competitors and came in an easy first. Another of the competitions which went down very well was throwing spears at pumpkins stuck on poles 40 yards away. After watching it I felt I should not like to fall foul of the Mashukulumbwe, for not only did they throw very straight and very hard, but nearly all the spears were so sharp that one could easily shave with them. We had a canoe race on the lagoon in native dug-outs (a very exciting event), a sack race, a three-legged race, a race for the little boys which was run off in several heats, and finally, after the prize-giving, a scramble for the women. Dale's clerk had a pile of fancy Kaffir clothes, cheap jewellery, beads, and gewgaws such as women love, and he threw them up into the air right and left. The shrill shrieks of excitement, and the wild scrimmages of the laughing women were a really good wind-up to a successful and happy day. The feast came at night. Dale had caused gallons and gallons of Kaffir beer to be brewed. Towards five o'clock liberal supplies of meal and salt were handed to the women, who started cooking for the men. The men were divided into eleven companies,

and to each company was given a fat bullock. I wanted Dale to run the bullocks out and let the Mashukulumbwe kill them with their spears, but he would not do so, for he considered the Mashukulumbwe too excited already, so he shot the bullocks one by one with his own heavy rifle.

We adjourned for dinner, and Dale gave us a repast composed of fish, buck, and birds, supplemented by plum pudding, champagne, and port, and we wound up with Christmas crackers. After dinner we had our chairs out on the square, and a huge log fire was lighted in front of us. The big chiefs, with their leopard-skin coverings, and bedecked with ornaments of savage splendour, sat by our sides, and our servants stood behind us. It was a clear night, with a full moon. The young bloods of the Mashukulumbwe nation, of whom I counted 376, fully armed, gave us a splendid war dance, a vivid picture of fighting their foes, killing them and triumphing. Then the girls came out and danced and sang and clapped. Then boys and girls together danced, and swayed and clapped to the sound of native music and the beating of the war drums. When the white men turned in at four o'clock in the morning the Mashukulumbwe were still at it, and it will always remain a red-letter day in their history. It was certainly the happiest Christmas I passed in Africa.

The next day I went down to the lagoon with Dale to try and get a hippo. We waited all the afternoon in the rushes without success; each time the hippo rose he never offered either of

us a shot into his nostril, which is the only fatal shot when hippo are in deep water. I think Dale loved everything but hippo, and any hippo within travelling distance of Nemwala was in for a bad time of it. Dale told me that one time an enraged hippo had attacked him in a native canoe, crunched the side of it, and forced him to take a 200-yard swim to the shore, and, worst of all, to leave his two most valued rifles at the bottom of the Kafue in 50 feet of water.

Two days after Christmas my carriers arrived, and I said good-bye to my hospitable host and resumed my journey northwards.

CHAPTER II

Across the Congo Border

I was not exactly looking forward to the rest of the journey to Katanga as being a pleasure trip. The rainy season was now properly on. There was starvation amongst the natives ahead of me. And there were nasty rumours, which seemed to indicate that small white men, unless they had a really good name with the natives, ran some danger of being murdered. These rumours did not worry me very much, because in the first place I had Mohammedan servants, and in the second place I always had my shot-gun close to me, and I knew that it always gave me four lives at my command—two in the barrels and two by quick reloading.

After having been ferried over the Kafue I stopped to lunch with the Irishman in charge of the drift, telling my carriers to trek on another 10 miles. At the crossing the Northern Copper Company had several native canoes, two steel boats, and a pontoon for taking wagons and Zeederberg's coach across the river. While at lunch Zeederberg's up-coach passed. It was "horsed" by six trotting bullocks. The outspans were 10 miles apart, and at each were kept a number of bullocks in strong stockaded enclosures.

By means of relief drivers and frequent changes of oxen the coach did the distance between Kalomo, the capital, and the Government post of Numbwa (which was 10 miles from Ninga, the headquarters of the Northern Copper Company) in less than three days. Had I been able to afford it, I would have travelled the first two stages of my journey, more than a quarter of the whole distance, by Zeederberg's coach, but unfortunately the prices were prohibitive.

That night I camped near a small Mashukulumbwe village, and the next day I halted for luncheon near a very large one. I had intended to go on farther, but, hearing a shouting in the bush, I went off to see what it was about. Round a freshly killed lion I found several Mashukulumbwe. The lion had been skinned and, unfortunately, the mane had been cut off from the skin, which was a particularly good one, and I was really disappointed that it had been spoilt. However, the Mashukulumbwe always do that, cutting off the mane, which they wear as a collar round their neck. Returning to my luncheon, I decided to camp for the night. In the afternoon, followed by a dozen or so Mashukulumbwe, I went out shooting. It was rather interesting to watch them get ready for their afternoon sport. They were careful people and had no mock modesty or a false sense of shame. Each boy, having carefully removed all the clothes he was wearing and having left them in his hut, the whole party, armed with two spears apiece, started out with me stark naked. The country was very open, with a lot of big ant-heaps about. When-

ever I saw a reedbuck I walked so as to get an ant-heap between me and the reedbuck, and was generally able to walk up to within 20 yards of my quarry and thus have a certain shot. The nakedness of the Mashukulumbwe had its disadvantages. When I shoot a buck, and intend going on to get another, I generally put a spear in the ground near the dead animal; I then annex some part of a native's dress and tie it to the spear so that I can easily find my kill on my return. As the Mashukulumbwe were wearing no clothes, I made them carry each reedbuck as I shot it along with me. I am a bad rifle shot. My quick snap-shooting with the shot-gun, to which I owe my native name "Chingala," is to blame for this. That day I had the good luck to kill four reedbuck without missing one. On our way home a duiker got up. I was wearing a whistle round my neck and I pulled it out and blew it. Most small buck will pause a second or so if they hear the sound of a whistle. However, this one did not. It was nearly 200 yards away by the time I fired, and running hard. I saw the dust throw up at the foot of an ant-heap about 300 yards away, and I thought I had missed. The duiker ran another 50 yards and dropped. It was a real fluke, but I felt very much pleased with myself, especially as I had Mashukulumbwe with me. I felt that if I came through that country again I should be treated with great respect after having shot five buck consecutively, and the last one running.

On the third day—I was out of the Mashukulumbwe country—I halted and camped about

eleven o'clock as I saw we were in for it. All round us were little whirlwinds of dust—fifty or more—rising to the darkened sky. A few moments later there was a regular cloud-burst. The carriers had just finished building their little shelter of sticks, leaves, and grass, when one of the most violent storms of thunder and lightning I have ever witnessed in Africa came on us. It cleared up about four o'clock. About an hour later—it is wonderful how news travels in Africa—I had a visit from the chief of a starving Batoka village. He came to tell me that there was a herd of zebra grazing near his village, which was about 4 miles off the road, and he begged me to come and shoot one for his people. I went out with him and knocked over a couple of zebra, which I gave to the chief, and did not reach my camp until nearly nine o'clock at night.

The fourth day of this trek was the 31st of December 1905. I started at sun-up, and marched hard into Mumbwa at the head of my carriers, doing a measured 14 miles in three and a quarter hours. I was received most hospitably by the agent of the African Lakes Corporation, who have forty-two trading stations north of the Zambezi. I lunched with the white non-commissioned officer, a German of a well-known family, who was in charge of the detachment of the B.N.P. stationed there. The District Commissioner, Mr. Anderson, lent me one of the Government quarters to save me the trouble of pitching my tent. He was a very sound Scotsman, and, because it was New Year's eve, he had raked up everybody in the district who had a drop of Scottish blood in him.

We had a truly Scottish dinner, with bagpipes and the haggis, and we drank gallons of Scottish whisky, seeing the New Year in with a *feu de joie*. I had a dreadful headache when I went through on a borrowed bicycle, some three hours after my carriers, to Ninga, the headquarters of the Northern Copper Company.

At Ninga there must have been close on forty white men, most of them being prospectors of the Northern Copper Company waiting for the rains to finish, as it is almost impossible to do good prospecting work for the last half of the rainy season. I called on Davey, the engineer of the Company, who asked me to dinner.

I had camped just outside Ninga. While I was having my bath in my tent, after sunset, I heard a shout that a dog had got my bacon. I grabbed my shot-gun, but the light was too far gone to get a shot. I was really angry with my cook for not having secured it properly, for it was a loss that I could not replace. In Africa there are certain things a white man must have. He must have flour, tea, sugar, and coffee: practically everything else he would want he can either buy from the natives or shoot for himself. But no man could continue eating buck and birds every day without some sort of flavouring, and he must carry with him *bacon, herbs, and onions*.

I mentioned previously some of the dangers attending the white man moving about in this part of Africa, and the story of an attempted murder of a trader by his cook and carriers had been told me with differing degrees of accuracy by almost every traveller I met *en route*. Davey

told me the true story at dinner that night. He was driving with a Cape-cart and four mules to visit one of the Northern Copper Company's mines. Seeing a tent in the bush, he reined up, and, thinking it was one of the Company's prospectors, he directed the Cape-boy he had with him to go and find out who the owner of the tent was. The boy came running back with his eyes half out of his head and gasped out, "Ants eat white man!" Davey went to the tent. On the ground, insensible, with two spear wounds in his face and a huge gash in his stomach, from which issued blood, on which millions of little black ants were feeding, lay, clutching his rifle, a small white trader, well known to Davey. The latter and his servant carried the trader to the Cape-cart, and hurried him to the Company's hospital at Ninga, which was only 12 miles away.

When the man recovered consciousness, this was the tale he told. On the morning of the day that Davey had found him a dozen of his Mashukulumbwe carriers came into his tent in the early morning, and promptly proceeded to spear him. He reckoned he was saved by sleeping under mosquito curtains, which hampered the movements of his assailants. He was stabbed three times before he could grab his loaded rifle. He fired three times, wounding two of them. In their fear his assailants bolted, while, a few minutes later, faint from loss of blood, the trader fell insensible on the ground beneath his tent.

The District Commissioner of Mumbwa had succeeded in effecting the arrest of the Mushukulumbwes who had attacked the trader, and

had them lodged in gaol. The prisoners' story was that the trader's Atonga cook—a Christian native—told them that their master had plenty of money, and that if they would kill him the cook would pay them £1 apiece. When I was at Ninga I was sorry to learn the Government had not succeeded in capturing the cook, but I was really glad to hear that the trader was on the high road to recovery.

On my way to Katanga every one was talking about the wonderful tin discoveries in the Southern Congo (for the country has tin and iron as well as copper), and also about George Grey's bicycle ride down south during the rainy season of 1903–1904. From half a dozen people, for Grey never talked about himself, I have pieced together this story of the record bicycle ride that ever has or ever will be done in Africa.

It seems strange to the average stay-at-home Englishman to hear that bicycles have played a large part in the developments of Central Africa, but the reasons are really quite simple. A great deal of Northern Rhodesia and the Southern Congo is infested with tsetse-fly, and there no domestic animal can live. Further, north of the Zambezi the thorn bush, which covers huge areas in the south, is practically non-existent, and, therefore, there is no risk of puncturing pneumatic tyres. To solve the problems of quick movement, Grey, aided by Dooley, an import merchant in Bulawayo, had designed a special type of bicycle which can be bought in London from the Beeston Humber Company, and which is known as the "Grey Pattern Humber." It

is on bicycles of this make that much of the pioneer work in Africa has been done, and, needless to say, it was on one of them that Grey made his marvellous journey.

As far as I can gather, the reasons that led Grey to take this hasty trip home—a trip which is now historical—was that the Directors of the Tanganyika Company, actuated by what appeared to be the soundest business reasons, ordered Grey to close down the Kansanshi mine. Now, as a matter of pounds, shillings, and pence, such a course was probably wise, but strategically it was not sound, because Kansanshi was practically Grey's only *point d'appui*. There had been three serious revolts of native troops in the Congo, and at any time it was possible for a widespread rebellion to take place, therefore it was absolutely necessary for Grey to have some base in British territory to fall back on.

Grey took a hurried bicycle tour round the Concession and made arrangements for his absence. Then he started home. The first day he rode from Kambove to Kansanshi, roughly 100 miles. The following day he tried to make Kasempa, just over 100 miles south, on the worst possible native path. At seven o'clock at night he was about 8 miles from Kasempa and too tired to walk and wheel his bicycle at night, so, putting his bicycle up against a tree, he lay down in the forest and slept. He arrived at Kasempa in the morning at breakfast-time, and that day covered half the distance between Kasempa and Ninga, sleeping in the forest with two messengers whom, a week or ten days before,

he had caused to be sent on with blankets and food. The next night he reached Ninga.

Davey described to me Grey's arrival at Ninga. He was in his shirt sleeves and had cut down breeches, such as boy scouts wear, and all he carried on his bicycle was a razor, a toothbrush, and a tin of Plasmon biscuits. Davey implored Grey to carry arms with him, and did his best to persuade him to accept the loan of a revolver. Grey, in refusing Davey's offer, pathetically said, "I cannot carry arms, you know every ounce of weight tells." The following night Grey made the drift at Kafue and on the evening of the sixth day he bicycled into Kalomo; this journey I took five weeks to do on foot. Giving himself a day's rest in Kalomo, he bicycled on the eighth day to the Victoria Falls, where he hired a Cape-cart and was driven down to railhead, for the railway at that time had not reached the Falls. He arrived in England thirty-three days after leaving Kambove, then rightly described as "one of the most inaccessible spots in Africa."

I was in a very bad way for food when I left. Davey was feeding the natives in his employ on food imported from Bulawayo, and, as a special favour, he allowed me to purchase 40 lbs. of meal at cost price (4d. a lb.). These 40 lbs. were all I had with which to feed my three personal servants and ten carriers, for a march of 146 miles, as I knew that no food was to be purchased from the starving villagers *en route*. The first day out I fired at an oriby and had a most severe blow back in my rifle, a piece of the copper cap coming out of the gas vent and lodging in my right lower

eyelid. I regretted bitterly having bought second-hand ammunition, because nitro-powders often degenerate if kept long in tropical Africa. In consequence I distrusted my rifle. The third day I recrossed the Kafue by a very good ford, and the next day I missed shot after shot, letting off a mob of sable and a herd of bush-pigs. That night I gave my carriers a small handful of my own flour and a few birds I had shot, and I felt very apprehensive of the future. I made up my mind that I must no longer be afraid of the bolt not holding when I fired, and must chance getting my eye blown out. The next afternoon I saw a duiker and I nerved myself not to lower the rifle quickly as I pulled the trigger, with the result that I killed the duiker and thus regained my confidence. In the evening we crossed the Lunga, where a few shots had been fired by the chief Kalasa at Grey's second expedition. I camped at a little village, and at dusk shot a couple of roan antelope, which gave us plenty of food to carry us on to the Government post at Kasempa.

I visited old Kalasa before arriving at Kasempa. The poor old man was very infirm and nearly blind, and his fingers and toes were rotting off with leprosy. He had been a great warrior in his younger days, and, if he had had the people to back him up, he would have been every bit as great a man as was once Msidi in the Congo, or as Lewanika was then in Barotsiland. The great respect which my carriers showed in saluting him told that his name was still good, and that he was held in veneration many miles away.

The Government station at Kasempa, which came into view as I rounded the foot of a hill about 1000 feet high, was an agreeable surprise to me. Like all Government posts, it was built in a huge quadrangle, but instead of mud and pole huts the buildings were of brick. And I was still more surprised when I learnt that the building had cost the Government nothing. The District Commissioner, on his arrival there two or three years previously, had found the country round in a very disturbed condition owing to the aggressiveness of the Portuguese slave raiders, and even at the time of my visit his police were scrapping on the western border with would-be slave traders. The district was by no means safe, for I noticed that the mail carriers were all armed with rifles. The brick buildings at Kasempa were due to the capture of a couple of white Portuguese slavers, whose trade goods and riding bullocks were secured by a surprise attack of the native police led by the District Commissioner. Having got this large supply of potential wealth, the District Commissioner imported Atonga brickmakers and bricklayers trained by one of the missions on Lake Nyassa. After building the station he had a surplus, because, when I came, there was still £60 worth of the slavers' captured goods in the Government stores. The Kasempa district has been one of the few parts of Africa that have succeeded in putting up a fight against the Portuguese slave-capturing advance, and a local native told me with pride of a great killing of twenty-three Portuguese, some years previously, by one of Kalasa's

lieutenants. I believed the story, but discounted the numbers of killed.

I stayed at Kasempa two nights as the guest of Copeman, the District Commissioner, and learnt more of the Tanganyika Concessions and of the difficulties they had to contend with. Ericksen, one of the Company's prospectors, had gone down south to fetch up in pieces two small experimental water-jacket furnaces for smelting copper. On his return he had run unexpectedly into starvation country—for there was a dreadful famine that year—and, although he had worked himself almost to death in shooting game to feed his carriers, he had lost five men from want of food before he reached Kambove.

The Tanganyika Concessions had been getting up their stores by a most roundabout route. They landed all their goods at Chindi, the Portuguese city near the mouth of the Zambezi, transported them to the south end of Lake Nyassa, freighted them on one of the African lake steamers to the north end of the lake, and then carried them over 450 miles to Kambove. Although a long transport route, this was a good one, because there were plenty of natives along it, all of whom usually grew more food than they actually required for their own needs. Plague broke out in Chindi, and without a word of warning they found their route suddenly and peremptorily closed. There was no surplus of European stores in Kambove, so Grey sent down little Billen, one of the Company's miners, to rush up 200 loads of European food-stuffs from the south. Billen was returning a few marches behind Ericksen,

who sent back word of the terrible state of the country ahead. Billen took a bold course. He fearlessly struck out west into a country which was then a sort of no man's land, for the King of Italy only then made his award (1905) of the boundary between the British and Portuguese spheres. Billen had heard that this country teemed with game, and his information turned out to be correct. Although he took eleven weeks to do a journey which, if he had travelled by the direct route, he might have got through in a month, yet he shot 1350 head of game, and brought in his loaded carriers as fat as butter.

There was a young leopard, little more than a kitten, which was the station pet at Kasempa. It was always present at meals and very playful. One night we got on leopard stories, and Copeman told me a yarn, which seemed incredible at the time, but which I have since learnt is absolutely true, of a man who, on entering his house, was sprung upon by a leopard. He seized it by the throat and held it firmly till his servants came up and speared it, escaping without a single scratch himself. Just after leaving Kasempa the second morning out (I was trekking before sun-up) I saw a leopard on the stump of a tree about 100 yards off, sitting with his back towards me. I took off my boots, signed to my carriers and servants, who were close up to me, to wait on the road, and walked into the bush with my rifle. I got within 20 yards of the leopard before he turned his head. He had only turned his head because his mate, who was about 30 yards farther on in the bush, saw me. I fired: he fell off his

perch. Luckily for me, my servants and carriers shouted and came running up from behind. In my excitement I wrenched back the bolt of my mauser—it was a nasty, foreign, cheap affair—and the extractor cleared the cartridge. I was in a nice fix: a leopard, probably wounded, facing me 20 yards off, flicking his tail and looking very nasty, while I stood facing him, with my hunting-knife in my left hand, and banging the butt end of my rifle on the ground to try and get the cartridge out, shouting all the time, "'Sifefe ami, 'sifefe ami!" (My shot-gun, my shot-gun). But for the answering shouts of my people coming up, I am certain he would have charged. By the time the shot-gun was in my hands both leopards were over 60 yards away. I was so thankful for my escape that I would not follow up; for a wounded leopard is the most dangerous animal I know of.

That last stage of my journey in North-Western Rhodesia was the most unpleasant bit of the whole trek. I had no bacon; my carriers were in no condition to march, because, before I took them on, they had been living on mushrooms and honey: every village was deserted—the people being camped out in the forest to gather the meagre sustenance which the bush afforded—the tsetse were very thick in the forest, and in the vleys and dambos the blind-fly in their myriads bit my bare knees till they were red and swollen; the miserable bush track was nothing but mud and water, and it rained in torrents the whole time. The only redeeming feature of that part of the journey was that I was lucky

enough to shoot enough meat to feed my people, for I had left Kasempa without a bite of food for them.

One thing of interest that I remember about that journey, other than my meeting with a certain white man a day's march out of Kansanshi, happened one clear morning. It was exceptionally bright after the heavy rain of the night before. I was making a rather steep descent into a small spruit, which had a big vley on the far side, and I got a view which was unusual for that level country. I was able to see, about 30 miles away, a low ridge apparently 40 miles long, straight ahead of me; it was a part of the great Congo-Zambezi Watershed, and I knew that my journey's end was near at hand. A little to the east of north was the striking mountain of Chafuguma, and, being on my side of the ridge, it was evidently in British territory. Beyond the ridge appeared two isolated hills and two small ranges, so I could see I was coming to a more interesting country than the flat tableland of the British sphere.

A day and a half's march out of Kansanshi I met Captain Brown, an ex-officer of the Canadian North-West Mounted Police. He was on his way home by the shortest route to England, after having carried through an enterprise that must live in history. The natural route from the great Katanga Copper Belt to the coast is through Portuguese Angola, along the water-parting of the Congo and Zambezi Rivers. Major Boyd Cunningham had undertaken to open up this route for the Tanganyika Concessions. He and a small

group of friends had settled, after the South African War, amongst the Boer voer-trekkers in the interior of Angola, and gone in for cattle-breeding on a large scale. Brown had cut the way ahead for Cunningham's nine wagons that were carrying the Tanganyika's mining supplies from Benguela to Ruwe, a journey of 1200 miles, through virtually an unknown country. Unfortunately Brown and myself had both breakfasted, and it was too early for luncheon, so I only had about ten minutes' conversation with him before we both moved on.

Kansanshi mine, where I made my first acquaintance with the employees of the Tanganyika Concessions, was an open patch in the forest of about 250 acres—open because the ground was impregnated with copper salts. It was slightly higher than the rest of the country, and was traversed by a little ridge flanked by long trenches of old native workings, which varied in depth from 12 to 80 feet. The mine had evidently been worked at intervals by different native races, who had followed leads of rich self-fluxing ground impregnated with carbonate of copper. The ground not mined was hard rock or else soft rock too poor for the natives to work, the system having simply been to pick out the "plums" or "eyes" from the mine, and to abandon work when the depths became too great for their primitive methods of hoisting.

At the time of my arrival there were four white men at Kansanshi, namely, a local manager, a road and mapping man, who was afterwards killed by a leopard, an ex-missionary who was

employed as storekeeper, and a miner, who was sinking the main shaft and also driving on two faces at 100-foot level. I lunched with the local manager, who told me that they had had to reduce their native establishment on account of the impossibility of feeding it. As I had a bad attack of fever, the first I had had on the journey, I turned into bed directly after luncheon. In the evening the storekeeper came and talked to me. About three or four years before, as a youngster, he had been fired with the idea of carrying Christianity into the wilds of Africa, and had attached himself to a mission in Uganda. How he came to the Tanganyika Concessions was an interesting story. When the Copper Belt was discovered the men in Africa had no idea how they were to get copper to the coast. George Grey, who knew his men—the outside men were all picked and there was no danger of their having trouble with the natives—thought nothing of telling off parties of two or three white men to take three months' provisions, and a few trusses of calico, and wander out to the east or west to look for a railway route and a possible port. One of these expeditions, a real wild goose chase, wandered out through Uganda. The storekeeper was thoroughly dissatisfied with the work of the Protestant mission to which he belonged, and, buoyed up by the enthusiasm of the two prospectors he had met, left religion for business. Alone and unaided he covered 1400 miles to Grey's African quarters. He was lucky to get taken on, but, like all other adventurers, who were not protected by agreements with the Tanganyika Company, he had to

work "under wages" and wait to see what the future offered.

The next morning I had shaken off my fever. Taking the same carriers on with me—they came willingly—I made for the Belgian post at Musofi, 2 miles beyond the Congo border. Musofi was about a mile off Grey's bicycle path, between Kansanshi and Kambove, and consisted of half a dozen thatched pole and darga (mud) buildings. There was a garrison of native soldiers between thirty and forty strong. No field of fire had been cleared round the post, and the forest came right up to the European residences and native infantry quarters. There were a couple of cannon there, but I could not see what good purpose they could serve, and most white men who had visited the post laughed at these two little pieces of field artillery, which some brilliant office boy in Brussels had caused to be transported, at enormous expense, to "overawe Kansanshi" and prevent a possible attack from the south! From a flagstaff by the Chef-de-Poste's residence floated an immense blue flag with the golden five-pointed star in its centre, the official flag of the quasi-philanthropic Congo State.

The Chef-de-Poste, who was a jolly little Belgian, received me most hospitably and invited me to a really excellent dinner—for the Comité Spécial of Katanga (the commercial organisation with executive powers which administered the Southern Congo), if it does not pay high wages, at least knows how to feed its people. At dinner we were joined by one of the Congo Government officials, a customs man. The two Belgians told

me all about the Congo State. It seemed that everything was forbidden. This portion of Katanga was a game reserve, and it was only lawful to hunt "wild beasts and mischievous birds." "Of course," added my informant, "if you are promenading in the forest, and are actually attacked by an antelope, it is permissible to essay to kill it with your rifle, and if game birds are damaging the crops, which belong to you or to one of your friends, one is able to slay them." I found also that the law required me to take out a permit of circulation, that I would have to register myself and my servants, and that I had to pay duty on my arms in one place, and send them to another to have them stamped with the official star and numbered, and the description of them recorded. Both officers were very kind and courteous. They advised me to take the Belgian road to Kambove. True, it was longer, but there were villages on the route, and food was procurable for my porters. I followed their excellent advice, and, before leaving, they kindly permitted me to make a few notes of the journey ahead from the large-scale map of the intrepid Lemaire.

Before leaving I was given a large supply of native foods for my carriers, and several tins of excellent vegetables and two bottles of good wine for myself. My hosts were good fellows, and really generous; in spite of the annoyance caused by dinning into me the vexatious and ridiculous regulations of the Congo Government, I was able conscientiously to say, in bidding good-bye and thanking them for their hospitality,

that I would "entertain the happiest recollections of my visit."

The Belgian road, which I followed, was the native path "scuffled" or cleared of grass and small roots; it was exceptionally straight, and followed the left bank of the Lufira, one of the great tributaries of the Congo, to Lukafu, the headquarters of the local government. I passed several small villages, and at Ntenke's big one I was able to get a very large supply of native foods. All along the route were rest-houses; but they were in a state of disrepair and more used by native carriers than by Belgian officials travelling.

After travelling about 80 miles I arrived at Kanionina's village, where the Tanganyika carrier transport route from the north end of Lake Nyassa crossed the Belgian road. Kanionina, who was upwards of sixty, had a touch of Arab blood in him. He slapped his hand against his right leg and then raised it in a semi-military salute. "Good morning," he said. "You speak English?" I asked, and my answer was another "Good morning." I learnt later that the English had taught the natives to say, "Good morning," and the Belgians had taught the salutation of "*Bonzou*" (*Bonjour*).

It was a fine morning, without a cloud in the sky, when at sun-up I left Kanionina's. I had about 24 miles to march to Kambove. The Mpanda River, which I had to cross just after leaving the village, was in flood. The decking of the old bridge had gone in many places, and the carriers had to feel very carefully each step, for

the flood water above the bridge was breast high and running strong. About 7 miles farther on I started to climb out of the Lufira valley, and, on the left of the road, for the first time, I saw one of the copper mines of the great Copper Belt of Katanga. From a little kopje I could pick up, some 80 miles to the north-west, the high peaks that skirted the great island-plateau of the Kundelungu. It is on a spur at the foot of this plateau, near the village of the paramount chief Mwenda, that Lukafu, the headquarters of the local Belgian government, is situated. I resumed my journey and, 2 miles farther on, passed on the right of the path an isolated round hill about 400 feet high, and about 1000 feet through its base; as there was no vegetation on it, I knew it to be a copper mine (Likasye), and I could see from the road the openings of several tunnels driven into it.

The sky had been beautifully clear at starting, but I could see four storms rushing up from different directions which would meet somewhere to the right of my road. I told my servants to hurry up and prepare luncheon just in time. I had barely finished my meal when the storms met and broke about 3 miles from me, and I ploughed knee-deep in water up the hill beyond which was Kambove mine. I subsequently learnt that 3½ inches of rain had fallen in two and a half hours.

It was fine when I arrived at Kambove about two o'clock in the afternoon, and one of the storekeepers returning to work told me that George Grey lived in a big brick house called

"Msesa," about a mile and a half farther on. I left my servants and carriers to await my return to Kambove, and walked over to have a business interview with Grey. I found him in his shirt sleeves sewing strips of raw hide through holes in a wood frame, which was to serve for a bed. He was not at all pleased that I had come up there, and told me that he had put warnings in all the local papers telling men in the south that the Tanganyika Concessions had no work for them, and, if they came up, it would be at their own risk, for the Tanganyika Company would refuse to sell or give them stores, or help them in any way. I told Grey that I was quite willing to go back as I had carriers with me and enough supplies and money—I did not tell him that I would only have £8, 2s. 6d. in the world after paying off my carriers—and that I felt certain if I returned to Kalomo I could get employment with the Government of North-Western Rhodesia. Grey said, "You evidently have not got too much money, and you had better stay and make yourself generally useful until I can find something for you to do."

CHAPTER III

With Grey in Katanga

After my business interview with Grey I walked over to Kambove, brought my kit to the small guest-house adjoining Msesa, and installed my carriers and servants in the two small huts behind. I then went and sat down in the arched brick hall of Grey's big red house. I could hear Grey splashing in his bath, and, while I was waiting for him to come out to dinner, I had a visitor. My visitor was Violette. She was a little rough and rather heavy, and she would insist on scrambling on to my lap and trying to kiss me. Violette was George Grey's tame bush-pig. Many times afterwards I had friendly conversations with Violette, and once she visited my camp on her own account and stole everything in the eating line that she could get hold of.

Two or three months after my arrival Grey gave a little dinner-party to enable the men at Kambove to make the acquaintance of some Belgian officers, who were passing through. There was a fricassee of duck, followed by bush-pig. One or two of the men were much surprised to learn that the ducks were some of a lot of twenty that Grey had had carried up at very great expense.

It must have cost probably thirty shillings a head to buy and bring those ducks up from the south. They wondered at Grey's extravagant generosity, for he was never a man who went in for vain show. There was some inquiry as to who had shot the bush-pig, for none of the meat had been received in Kambove. The secretary, noticing that Grey was not eating any of the *pièce de résistance*, told him that the bush-pig was exceptionally good. Grey said, "I do not care to eat any of it." The secretary asked, "Why not?" Grey in his slow way said, "The bush-pig is poor Violette." The secretary jumped up and almost shrieked, for Violette was a general favourite. Grey turned on his secretary pretty sharply, saying, "She killed seventeen of my ducks this morning and I had to shoot her."

Grey always entertained any Belgians who passed through Kambove, and he used to invite his secretary and some other employees of the Company to meet them. On one occasion Commandant Tonneau, the representative of the Comité Spécial of Katanga, the ruling power of the district in which the Tanganyika Concessions were working, was being entertained. Grey, who had his whole heart in his work, wanted to talk business, and Tonneau wanted to tell stories. Tonneau's English was bad, and Grey's French was worse. The secretary, sitting between the two of them, acted as interpreter. "I want you—to tell—Commandant Tonneau—that I anticipate a serious——" began Grey. Tonneau, tapping the secretary on the shoulder, leant forward and said, "Monsieur le Secrétaire, you

must tell Monsieur le Directeur this story about the lady and the asparagus." The secretary glanced at Grey—Grey frowned and looked very fierce. Courtesy compelled the secretary to listen to the story, and besides Tonneau was a very good raconteur, and the story was a good one. And so all the evening it went on, the two big men of the Southern Congo absolutely at cross-purposes, one wanting to talk "shop" and the other wanting to enjoy himself.

I am getting on too fast. Grey made me fully realise that I had done a very serious thing in coming up to Katanga "on spec," and that all I could hope for would be a small amount of European stores to enable me to live decently till the chance arrived to make use of me. I suggested that I should investigate routes for transport, for I was convinced that the best communication from the Copper Belt with the south was by means of the Kabompo and Zambezi Rivers. Grey negatived this as he explained the railway would be in Broken Hill (the Northern Copper Company's big lead and zinc mine) in six months' time, and then Kambove would be only 350 miles from railhead. The next day, however, an idea of using me occurred to Grey. I had arranged with the local manager of Kansanshi that my carriers should carry return loads of European stores from Kambove. Grey saw that my carriers had plenty of food, and asked me where I got it. I told him, and he suggested that I should go out food buying. Foolishly I refused, as I could not then see any future in such work, so before Grey left he handed me over

to his secretary, under whose orders I was to be till his return.

The secretary put me on to translating work, and this, together with my own reading and what others told me, enabled me to realise exactly the position in the Congo. I saw that there had been an appalling loss of life, caused almost entirely by sending out low-class Europeans, who were possessed neither of leadership, initiative, nor self-reliance.

One bright feature of the Congo business stood out. That was the action of the King of Italy, who had sent a naval captain right through the country. As a result of his envoy's report, the King of Italy withdrew every Italian officer and non-commissioned officer from the services of the Congo State, and from the command of troops belonging to the Concessionary Companies. As far as the Southern Congo was concerned, there were virtually no atrocities other than such as would occur when what would have been police work in British territory became punitive work under Belgian rule. My first actual acquaintance with anything wrong occurred when I had been less than a fortnight at Kambove.

A young Belgian officer named Moreau came into Kambove under open arrest. He was on his way down to Boma, the capital of the Congo, to be tried for killing one of the soldiers under his command. I liked Moreau. He was a bright youngster and a gentleman. He told me his story. He had been in command of a detachment stationed in the west of the Upper Luapula zone of Katanga, a region which was continually being

raided for slaves by the insurgents who lived in the territory of the Kasai adjoining his district. His isolated post required constant vigilance on his part to guard against attacks of the marauders. One night he caught one of his sentries asleep. He made him a prisoner, and applied to head-quarters at Lukafu, over 300 miles away, for the man's trial by court-martial. A few days later, when coming back from shooting, he found the prisoner fighting with the native serjeant. In trying to separate the combatants his shot-gun went off and killed the prisoner. He reported the case, was put under arrest, and ordered down to Boma for trial. Seven witnesses against him were sent down by a different route. Poor Moreau! They broke him, and gave him three months for involuntary homicide. Nearly a year later I saw in a letter written by him: "I am returning to Belgium. I shall re-enter my military family. I shall always curse the day I went to the Congo."

My work of translating failed to give satisfaction, for, although I wrote and spoke French fluently, I was at a loss for technical terms. The secretary, who translated English faithfully in place of writing French, pointed out all my errors to Grey. There seemed to be little chance that I should be given any work. As luck would have it, however, one evening the secretary was preparing tracings from the Kansanshi mine plans when I happened to go into his office. "Cannot you print better than that?" I asked. "*You* can't," he replied. I promptly showed him I could. The following morning Grey had

me into his office, and asked me to take on the draughting work. There was a new map to be compiled, the whole triangulation of the country to be made nice, and a lot of other work. Grey offered me rations and £10 a month. I pointed out the pay was not large, and that I had been considerably better off as a police trooper drawing extra pay for being attached to the Native Department, and for looking after a rifle range as well. However, I hoped for better things, and accepted Grey's offer.

I was now properly settled in Kambove. I had a mud-hut to live and eat and sleep in, and a similar one adjoining for my servants and kitchen. The secretary's house, which consisted of one big living-room, two bedrooms, and a big veranda, was next to my hut. Then there was another hut that I made serve for a drawing office. It had about a hundred yards of path, at the end of which was the large square, cleared of grass and roots, round which were the two big distributing stores, the grain store, Grey's office, the secretary's office, the retail store, and more huts that served for offices and living-places. To the east and south of Kambove were two dry spruits, one of them over 400 feet deep. To the west was a little hill from which floated the Congo State flag, at the foot of which nestled the small village composed of the huts of our native workers. To the north-west, for two miles or more, the Kambove mine extended, which continued under the square to the hill beyond the spruit in the west. On this hill were evidences of an extensive landslide, and tradition had it

that some hundreds of natives had been buried some two generations back when trying to mine too deep. But the marvel of it all was the cross-cut at the 100-foot level at the back of Kambove —437 feet in length, and ore still in both faces. This cross-cut averaged 12½ per cent. of copper throughout, and, for over 100 feet of its length, contained more than 40 per cent. copper. Kambove was one of the 200 mines that formed the great Copper Belt. Although I realised the many obstacles, I thought it was well worth while working " under wages " in order to get a footing, and to wait on the chance that I felt certain would come some day.

We were not a big party at our headquarters. Grey lived outside, nearly two miles away. The European strength in Kambove consisted of the secretary, a food and labour man, a chief storekeeper and his assistant, the accountant and myself—thus making the headquarters staff seven in all. However, hardly a week went by without visitors, and close in we had three Europeans. Bill Haggis, who had been one of Sir Redvers Buller's gallopers during the South African War, was sinking on Chituru mine; Studt, the German geologist, who was investigating, with Willie Jocks, a Transvaaler, fluxes about 4 miles out. I made a 32-mile excursion on foot one Sunday to visit Bill Haggis, whose camp was 16 miles away, and went down one of the shafts he was sinking.

I did not like the life in Kambove, and soon there came a chance of getting outside. One morning my servant Musa brought me a

loose-skinned tic, which he had dug up at the foot of one of the poles which, plastered with mud, formed the walls of the kitchen. He told me of the dreadful disease this tic produced, and how hundreds of people in the Achewa country, where the Yaos come from, died of its bites. My servants both refused to live in the kitchen, so I gave them my bell-tent to sleep in, and they cooked outside. I investigated my own hut and found these tics round the poles. I made some inquiries about the disease produced by them, and was told that it caused relapsing fever, which did not affect Europeans so very severely, but was often fatal to natives. Subsequently I talked to the doctor, a keen entomologist, and he gave me the life-history of the microbe which the tics carried. Before his investigation there were only two known tics that carried relapsing fever, but our doctor had discovered four others. They are only found in old houses and old camping-grounds.

I have never liked living in civilisation, although I appreciate its cooking, companionship, and comfort: not only did the sedentary life of a drawing office disagree with me, but we had shot every partridge within a mile radius; so with Grey's permission I went into camp in a spot of my own choosing some little way off the Ruwe road, and just under 2 miles from Kambove. Before this I had been getting slack, and was losing much of the zest of life. After a few days of camp I was a different man. I walked into my office and started work at half-past seven. A quick, sharp walk to my camp and back for a hurried luncheon in the middle of the day, and

back home again in the evening, forced me to do at least 7 miles a day, and I suppose I did 2 or 3 miles more trying to get a bird at dawn and at dusk. If I had nothing to do at night I would often put in two or three hours making little circular expeditions into the forest. On these trips I was alone and without a lantern, but I always carried my shot-gun. Thus I managed to learn, really well, every inch of country within a 5-mile radius of Kambove, for night exploration teaches one detail better than day work.

After I had been in camp about ten days, Eric Douglas, the accountant, who appreciated the value of exercise as well as myself, drew one of the Company's good tents out of store, and came out and joined me. We erected a few poles and made a shelter open on three sides, the top of which we thatched over with grass to serve for our dining-room. We had cleared of stumps and grass about a quarter of an acre of ground, on which stood our tents, dining-room, and kitchen. We had five chairs, three of them very cosy ones, a big mahogany table, all locally made, and we were very comfortable. Besides ourselves, our camp included our four personal servants, two of them cooks, who were assisted in their duties by a plate-washer and a pot-washer. Two raw boys, whose duties were to fetch firewood for the huge camp fire in front of which we sat in our easy-chairs after our dinner, brought up our establishment to eight. We bought a lot of native fowls, partly for food and partly to furnish our camp with eggs.

Speaking of eggs brings me to Rickytikky,

my mongoose, a present to me from Grey's secretary. Rickytikky was really happy in that camp, and we never had a snake come near us, for he chased and killed them all. He was never still unless he was asleep on my bed. Whenever a fowl clucked to say she had laid an egg, Rickytikky at once woke up and rushed after it. It was then a race between the pot-washer (who had the staff appointment of looking after the fowls) and Rickytikky, to see who got that egg first. Rickytikky was a bad loser, and showed no true sporting instincts, for he would bite the pot-washer's toes to try and make him give up the egg. If Rickytikky won the race, there was no egg at all, for Rickytikky got its contents inside him as quick as possible. The servants did not love him, although they were keenly interested in what he did. They knew how to avoid him when in one of his mischievous moods, but he often had a good bite at a strange native coming into camp. Although he was not always too polite when I turned him off my bed, I could always catch him, and he sometimes followed me in my daylight walks. Once he accompanied me into Kambove. Some one had started pigeons there, and on the top of a big pole were the lockers where they nested. Rickytikky spotted the pigeons, and in a twinkling was up that pole. Shrieking and chuckling with delight, he sucked eight eggs before the boy I sent up could catch him and bring him down.

Shut up in a box in my office, he grumbled very much during the four hours' work I had to put in that afternoon. When I returned at

dusk I did not mean him to have any more escapades, so I carried him home in my pocket.

We had all sorts of things round at night; the hyenas were a nuisance, especially on moonlight nights when one would give a long howl, to be answered by another half a mile or so away, and the chorus would continue until one of them found something to steal. One night the plate-washer rushed into my tent in a state of great alarm. He had been sleeping on the kitchen table, and a hyena had jumped upon it and upon him. It reached a big leg of buck that was hanging from the roof, and made off with it. I do not know if it was the same hyena or a friend of his, whom he had told of his successful burglary, which came a night or so later. I am a very light sleeper, and I had the satisfaction of blowing a hole in him, when he was about 2 or 3 yards off, with my shot-gun.

We kept our fowls in a little leopard-proof house at night. It was round, and made of split bamboos about 2 feet high and 3 feet in diameter. We had cut bamboos into 7-foot lengths, stuck them into the ground in a semicircle, and bent them over, putting the sharpened ends into the ground on the other semicircle, and we had laced split bamboos all round the cone thus formed. It had been covered over with leaves and twigs and covered again with grass. Each evening at sunset the firewood carriers and the kitchen-boys would run the fowls down, catch them, and put them to bed, shoving them through the tiny entrance of the house, which was securely blocked up at night by a board with a big stone

in front of it. The fowls did not like their home and much preferred sleeping out, but we knew more about Central Africa than they did. One night a leopard came. He was a very hungry and a very persistent leopard. He got nothing that night, and came again on the next one. Both times when he woke me up with his sighing and grunting I went out with my shot-gun and without a light, but could not get a shot at him. The next morning, while I was at my work in Kambove, the firewood boys ran into him just as he had killed a duiker. Having spears with them they succeeded in driving the leopard off his kill, and brought back the duiker in triumph to the camp. I had in my possession a damaged Martini-Metford carbine belonging to the Company. I built a little shelter of boughs with one narrow opening. Inside I fixed up the old carbine as a trap-gun, and baited it with a big piece of the duiker that the leopard had killed. I had all the boys up, and warned them that no strange natives must come and steal the meat from within the little shelter, telling them that, if anybody got killed, there would be trouble. About half-past five, on my way home from work, I heard a shot by my camp. I had a quarter of a mile to go, and when I got into camp there was not a boy to be seen, and neither my own arms nor those of the accountant were in our tents. I went to the trap-gun and saw that it had gone off. I could hear the boys shouting in the forest a couple of hundred yards away, and I rushed over to them. The leopard lay dead, the bullet of the trap-gun having entered his head above

the right eye-tooth and come out through the left temple. I felt really sorry for that leopard, because I knew he must have been three days without food. Twice he had failed to get our fowls, and the third time, when he had succeeded in getting something to eat, we had filched it from him and lured him to his death.

Kambove was quite a metropolis, and hardly a week went by without some wonderful character arriving. Of course most of our visitors were those wanderers of the world who are always hard up and on the look-out for the chances that offer in any new enterprise ahead of developments. Two or three of them were taken on, but the majority were advised to return south, and, in spite of our warning notices that we gave no rations to destitute Europeans, we generally helped them with European stores, ammunition, carriers, and calico.

One day a citizen of the United States, accompanied by a South African Colonial, came into Kambove. They were very badly equipped for the long journey, and were virtually starving when they reached our headquarters. The American approached the store-keeper and desired to purchase flour, tea, sugar, and other articles. The store-keeper told him that Mr. Grey's orders were very strict, and that he could not sell him anything on his own authority, adding that, although Mr. Grey was away at the time, his secretary would probably grant him permission to buy what he wanted. The other walked over to the manager's office and asked leave to make his purchases. The secretary expressed his regret

that he could not do so, but told him that, if he was hard up, he would help him by giving him a few stores.

The American replied, "I don't want charity—I have letters to Mr. Grey."

"Well, all right, give them to me. I'm his secretary."

"Young man," said the other, "I do not give important letters to secretaries."

"You get out of this place at once," shouted the secretary. The poor old fellow and his white companion, with nothing to eat but Kaffir foods, came to an anchor on one of our roads, some 16 miles from Kambove. Grey met him there, and brought him back with him to stay as his guest at Msesa. The old gentleman, who represented important American finance, was enabled to have a good look round the mineral discoveries of the Tanganyika Company, and, when he returned to Kambove, we found him a most agreeable and entertaining companion. One day he came into my office. I was then preparing (from the rough field work of the Tanganyika Company's triangulation) finished plans of the positions of the mines, and all the topography covered by our survey. I was also compiling a map of the country showing the discoveries and explorations carried out during the preceding five years. He stood over me for some time, and, with long pauses between his sentences, said, "You have got a lot of copper." Pause. "You are not going to get the copper supply of the world." Pause. "That tin of yours is worth looking at." Pause. "You have

not done enough work on it." Pause. "The Belgians here are no damn good." "They don't pay them enough." Pause. "They have good Belgians in Europe" (with an accent on the "o"), "though." Pause. "I guess I'll be getting home to write some letters."

Although an old man of seventy he was wonderfully hale and hearty, and a real good shot, and we all got to like him before he left. Like many Americans he had something wrong with his digestion, and the big financiers, who had sent him out, had provided him with the most wonderful medicine chest I had ever seen. One day one of the Tanganyika Company's prospectors went over to Grey's guest-house, where the American was living. He found the old man seated in front of the open medicine chest, lovingly fingering the bottles. "Here you—what ought I to take for my complaint?" which he proceeded to describe. The prospector was not much of a doctor, and would not run the risk of giving advice. "Do you know," said the other, "I have taken nearly everything in this durned chest, and can find nothing that will do me any good." The prospector, who was simple and straightforward, suggested that a little hot water might do some good. "Young man—I believe you're right. I want to wash out all this dope. Boy, bring me some hot water."

He had a splendid camera with him, which he had never used. The secretary, who was now friendly with him, hoped to buy it, and, as he was shaking hands with the old man, who was leaving on his return journey south, he asked how

much he would sell it for. "Young man—I don't sell things," and then as an afterthought he added, "I sometimes give things away to people I like." He had got his own back at last.

CHAPTER IV

GREY GOES HOME

IN a place like Kambove we were in touch with the pulse of the whole country, consequently I was able to take an intelligent interest in the work of every local centre. I used to receive from the manager at Kansanshi details of work done, and, from our assayer at Ruwe, all additional information about the Kansanshi mine. The monotony of plotting mine surveys, taking out quantities, and putting the assay values of silver, gold, and copper in every 5 feet of tunnel was relieved by letters that came up from the south. A lion named "Charlie" had taken up his headquarters close by Kansanshi mine. I may mention here that when once a lion starts eating people every one tries by hook or by crook to kill the maneater, which ceases to be spoken of as a lion, and is given a name instead. Almost every mail brought an account of some native being killed and eaten by "Charlie." The white men of the place went out for week-ends, and also were given special holidays to try and kill him, but "Charlie" never showed himself. He spurned with disgust all the legs of poisoned buck that were strewn by the paths he was known to frequent, and he was far too clever to return to his kill.

One evening the local manager had dined with a friend whose mud-hut was on the far side of the mine workings. On his way home with a lantern he followed a narrow ridge running the length of the old workings. On one side of the ridge was a drop of 12 feet, and on the other a drop of 35 feet. Half-way across—he met "Charlie"! In such a case a man must act immediately. He had got to jump. For the moment he could not remember which was the 12-foot and which was the 35-foot drop. Luckily he jumped right. Relighting his lantern at the bottom of the working, he found his way out at the opening and got home without any mishap.

"Charlie" had an ignominious end. The carriers, who brought goods to Kansanshi, used to build little shelters which are called *msesas*. A *msesa* is constructed by three poles of about 8 feet long bound together at the top. Against the tripod thus formed are leant many thinner poles of equal length. The whole is then covered with leaves and twigs, and, if the rainy season is on, grass is cut and the shelter roughly thatched. One night three boys were sleeping in their *msesa*. "Charlie" walked in at the doorway and took one of them out. As the lion turned round, one of his companions seized his tail, while the third boy jammed his spear into "Charlie's" heart. I liked "Charlie," although I was glad to hear of his death.

But there had been much more stirring events up north. The year before I arrived in Katanga there had been the Belgo-Baluba War. I need not describe the operations. The Belgians would fight the Balubas. Grey had no intention of

allowing the food supply for the native gold miners at Ruwe to be interfered with, so he had sent my friend little Billen with £200 worth of trade goods to distribute amongst the Baluba chiefs. Joking apart, a mission such as Billen undertook was attended by grave risks, and was of the highest political importance. Grey could not have chosen a better man than Billen. With most of the chiefs Billen had no difficulties; he merely gave them a couple of trusses of calico, with no conditions whatever attaching to the gift. He then told them that he hoped the war would make no difference to their selling food to us and sending it down to Ruwe. One chief, by name Bebe, who lived in a strongly stockaded village, had just repulsed a Belgian column, killing four of their soldiers and wounding nine others. Bebe refused to receive Billen, who adopted a bold line of action. Under a flag of truce he sent his rifle and his shot-gun into Bebe's village. This surprised, but did not satisfy, the chief, who, by Billen's herald, sent this message: "Tell my lord the Giant"—Billen stood 5 feet in his socks, but the natives feared him too much to nickname him the Dwarf—"that, if he will send me the little gun he carries in his pocket, I will have speech with him." Billen pluckily sent his revolver to Bebe. Two days later the latter, whose friendship had been gained through Billen's fearlessness and a £30 present of trade goods, accompanied Kalambo (as the natives called Billen) out shooting, and willingly humped 100 lbs. of meat or so on his back after the day was over. To-day the Balubas speak of Bwana

Kalambo (our lord the giant) in terms of affection and respect.

Two of Sir Edward Grey's brothers were in Katanga. Charlie Grey, George Grey's little brother, was local manager of the Tin Belt. With Furlong, the Tanganyika Company's diamond drill man, Charlie Grey was prospecting in his own district. A Baluba village, 4 miles away from where they were encamped, was besieged by a company of Batitela slave raiders. Grey sent runners through to the Belgian post 80 miles away, where there were white officers and a large garrison of native troops. The runners were picked messengers, and only slept one night on the road. At the end of the fourth day there was no news of the coming of the Belgian soldiers, and Grey saw that, as the besiegers had cut the villagers off from water, something must be done. He sent an urgent message to the Company's food buyer at Mazanguli, the local centre of the Tin Belt which was 40 miles away, and called for reinforcements.

In the darkness before the sixth day dawned Grey and Furlong, accompanied only by their personal servants, silently wended their way through the forest and took up a position in rear of the enemy's camp. As the first glimmer of light came from the East a native bugler came out of one of the shelters of the Batitela camp. As he sounded the first notes of the waking bugle call, either Grey or Furlong shot him in the back. Hurriedly the slavers stood to arms. They were bewildered, and didn't know where the attack was coming from. After Grey and Furlong had

killed twelve and expended nearly all their forty-three cartridges, which was all the ammunition they had to fight with, the enemy fled, leaving the two white men in possession of the field. The food buyer, who had made a forced march, reached the scene of the battle three hours later with six natives, plenty of ammunition, and half a dozen rifles. He was not at all pleased at having missed the fun. The spoils of the enemy's camp consisted of several flags and drums, and a dozen or more modern rifles, mostly Albinis, with which the Congo State soldiers were armed.

Modern rifles in the possession of slave-raiders may sound strange to those who imagine that the Brussels Conference prevented natives being in possession of arms of precision. But there are far more guns in the Kasai district of the Congo than even men who have been many years experienced in Africa realise. The Kasai district, which borders Katanga on the west, is the hunting-ground of the people who supply slaves to the Portuguese in Angola. The company of Batitela, over a hundred strong, which Charlie Grey had defeated, was one of those roaming parties of deserters from the Congo army whom Belgians and our statesmen describe as the "Revoltés." There have been three serious mutinies of the Belgian native soldiers, and there must be quite five thousand of these insurgents in the Kasai district. In the work of slave-catching they have formidable competitors in the cannibal Walensi, who buy their arms and ammunition through the Mabunda. The latter live partly in British and partly in Portuguese territory, where three empires

meet on the great Congo-Zambezi Watershed. The Mabunda give about £3 worth of trade goods for an able-bodied man, whom they resell to the Portuguese traders at Nana Kandundu for £7.

If I were to tell of all the little incidents connected with slave-catching that happened west of the Haut Luapula Zone of Katanga, I should never be able to stop writing, so I must get back to Kambove and my own doings.

I shared my camp with Eric Douglas, a man of sterling worth, whose friendship has been one of the best incidents of my life. We were two men of entirely different character. I liked good things to eat and drink, and despised comforts. I was lazy, yet capable at any time of very great effort. Douglas was a plodder, who liked comfort and despised high living.

With Grey I had some difference of opinion about the native dialects. One morning he wanted to give me some maps, so I walked over to his office to get them. It was shut, and he told me to send a boy for the keys. I called up the native office boy and said, "Wena hamba lapa lo kya ga lo Bwana Kanjipeti cheyla yena lo Bwana Nkubwa funa lo keys ga lo office." This is "kitchen" Kaffir, and is practically Zulu or local words with the English idiom. It is quite a lingua franca of South Africa, and the natives call it "l'esilungu" or the white man's talk. While we were waiting for the keys Grey remonstrated with me for talking like that. I told him that it was no good using any other language, as the natives did not understand the Tebele

dialect of Zulu-Kaffir. Grey told me to say something to him in Tebele. This I did in a way that surprised him. He said that he did not want to hear such villainous language as I had previously used, and urged me to learn one of the local languages or Suahili. The keys having arrived, he opened his office and presented me with a Suahili grammar and a Suahili conversation book. I protested that it was impossible for any man, even a man of strong character and firm purpose, to make an official language, and that, in spite of his efforts, "kitchen" Kaffir would hold its sway just as Hindustani, originally a mongrel camp compound of Hindi, Persian, and Arabic, has ruled in India for over three hundred years. "L'esilungu" is a great language in the making, easier than Esperanto, and one day it will be spoken by every Bantu from Cape Town to the Congo.

No man who worked under Grey had anything but good to say of him. He was straight, accessible, self-reliant, possessed of physical energy almost beyond human power, a truly great leader, a very strong character, and one of the best shots as well as one of the bravest men that have ever set foot in Africa. The marvellous thing about him was that, whatever he did, he never turned a hair. I have seen him bicycle in from Kansanshi mine—just on 100-mile ride over a bad road—and I should have thought that he had not ridden a couple of miles by his general look. Once, when he came back from Kansanshi, he learnt that there was no fresh meat in camp. The next morning he bicycled into Kambove about half-past eight o'clock, and

sent for Blane, the labour manager. "Send out a dozen boys to the Jilomba (or Dilumba) River. I have tied my handkerchief to a tree on this side of the river, and on the west side of the road, about 200 yards into the bush, there is a sable which I shot." Now the Jilomba River was 11 miles north-west of Kambove on the Ruwe road. Grey had not explained what he had done; it was not his way to explain things or boast, although he had every right to do so. What he had done was this: he had got up at break of dawn, about half-past five, bicycled 11 miles, keeping a sharp look-out for buck, shot one, marked the place, had then ridden back 11 miles for breakfast at his house at Msesa, and then 2 miles more into Kambove. Just think of it! Twenty-four miles before half-past eight in the morning, and something to show for this effort, to say nothing of his 100-mile ride the day before.

My post was of exceptional interest, as every bit of mapping and intelligence work passed through my hands. In compiling my map of the Company's concession I wanted to make use of good Belgian work. That of the Belgian, Lemaire, was thoroughly good, but his names of places and topography were inaccurate. I wish I could have made use of his geodetic points in place of some of our prospectors' work. I also wanted to make use of the Belgian tacheometric traverses undertaken for railway purposes. Grey would have none of them, because the Belgians had used the magnetic needle in place of carrying up or continually re-observing the azimuth, with the result that they had thrown

themselves out in latitude as much as 8 miles. I was really disappointed that I could not use their work, for I could have adjusted it. Their distances were correct to within a half of one per cent., their topography was very good, and their place-names were fair. With reference to this wasted railway survey of the Belgians a good story can be told of Grey. He had left Ruwe on his bicycle at four o'clock in the morning by the light of a full moon. At about half-past nine in the morning he bicycled into the Belgian survey camp. The Belgian surveyors were just finishing breakfast, and were preparing to start work. Grey was invited to partake of some refreshment. While he was sitting there some discussion arose amongst the Belgians as to how far Chilongo, the half-way resthouse between Ruwe and Kambove, was. One of them asked Grey at what hour he had left Chilongo, thinking he had slept there. Grey said that he did not notice the time when he passed Chilongo. "But surely," questioned the Belgian surveyor, "you must have noticed how high the sun was when you mounted your bicycle." "I did not get off anywhere. I left Ruwe about two hours before sunrise." The Belgian was bewildered; that a man could do 75 miles before ten o'clock in the morning was to him a marvel. I may add that Grey completed the hundred miles, arriving in Kambove before lunch, and then put in an afternoon's hard work doing business and writing letters.

During the six months I spent in Kambove Grey was there half the time; the other half he

was visiting the different outside employees of the Company, and he also gave himself a month's fishing and shooting trip. That roughly works out to sixty days of visiting, and on each day he averaged about 70 miles.

I well remember the last time but one that I saw Grey bicycle into Kambove. Eric Douglas, of the secretary's house, and I were sitting in the verandah having our nightly two ounces of whisky—at least the secretary and I were; for Douglas was a teetotaller. It was close on seven o'clock, and darkness had set in, for in latitude 11° south there was little or no twilight. As Grey passed the secretary's house he asked, without dismounting, if there were any important letters. The secretary answered "No," and added, "Have a drink, Mr. Grey?" Grey got off his bicycle, and some fifty natives, who had been running behind him, came up. While he was having the drink he asked if there was a hammock to be got hold of in Kambove. The secretary asked, "Are you ill, Mr. Grey?" Grey snapped out "No," and with some difficulty got on to his bicycle again, and rode on to Msesa, followed by the natives.

It seemed strange that he should have come in from the south, for we knew that he was coming from Lukafu, the headquarters of the Belgian Government. The roughly cleared native path, which we dignified by the name of the Belgian road, came in from the east, and it was about 120 miles from Lukafu to Kambove, a distance Grey always rode in one day. When the doctor arrived, four or five days later, we learnt what

had happened. After Grey had ridden 95 miles he ran his leg into the sharp bough of a fallen tree projecting into the road, inflicting a wound about 6 inches round and 4 inches deep. Now the Belgian road had no villages on it, for, owing to the extortions levied on them, the natives nearly always evacuated their villages on the Belgian roads. Fearing a breakdown, he had taken a route along which lay several villages, and he had called on natives to run with him into Kambove. He reached Kambove—a journey of 140 miles by the deviation—without dismounting after receiving this severe injury. The wound kept Grey inactive for three weeks. Another man would probably have been three months in bed in consequence.

It was just after Grey got well, and went up north to visit his little brother, that several outside men—nine in all—came into Kambove. This was of great interest to me, for I got them one and all to talk geography and economics, and they helped me considerably with my work. My life was now thoroughly occupied, and very happy.

Perhaps the greatest event was my meeting with Hayden, the Company's surveyor, who had come up with Grey in the early days. Grey had saved Hayden's life in the Matabele rebellion of 1897, and they were great friends in consequence. Hayden, to his own financial disadvantage, joined Grey's second expedition, not only because he liked him, but also because he hoped that Grey's adventure would result in a successful raid, and that Grey would take the Congo. It was not only Hayden who was disappointed, but also

many others at home, who hoped better things of Grey than settling down under the Belgians, who had turned the whole Congo basin into one vast monopoly.

Hayden, who had recently completed the triangulation, had come into Kambove, and was going down south to look for a traction engine road, between Kansanshi and Kambove, to connect up with the traction engine road in North-Western Rhodesia, which was then about to be cut between Kansanshi mine and Broken Hill, the temporary railhead of the so-called Cape to Cairo Railway. He was also going to look for a suitable district for a farming settlement in the British Territory, which had to be in a country free from tsetse fly, and which George Grey wanted to be near the route between Kansanshi and Ruwe, for the idea at that time was that the Cape to Cairo Railway would turn off at Broken Hill, and then run out due west through Ruwe, the port of Lobito Bay which adjoins Benguela, the commercial centre of Portuguese Angola.

I had several talks with Hayden, with whom my work had brought me much in contact. I took the greatest interest in the projected roads, as I had been given to understand that I should be making them under his direction. He had sent in a report, and a map dealing with the route he had selected for our traction engine road in the Congo. Although Kansanshi lay due south of us, Hayden had left Kambove in a north-westerly direction, and, after going 7 miles through the hills, he had followed the top of the waterparting of the Mura and Dikulwe Rivers for 18 miles;

he had then turned south, following the divide of the Lualaba and Lufira tributaries to the Congo border, and thence to Kansanshi without crossing water the whole way, a dead level route and only 24 miles longer than the distance as the crow flies between Kambove and Kansanshi. Hayden had not, however, found the best route for the first 7 miles out of Kambove, as the spine of a small plateau and some very broken country compelled a special study of it to decide how these first 7 miles should be cut.

One Saturday afternoon I took my tent, camped by a small water hole in the hills, and did my utmost, by walking and searching all Sunday, to find the best ascent to this spine, which was about 550 feet above Kambove. I got back to my permanent camp after dark on Sunday night, where my servants informed me that Kambove had been completely destroyed by fire. After a hurried dinner with Douglas, who had accompanied me on my trip, I walked into Kambove, and there saw the smouldering remains of what had been our headquarters. Thirty tons of native food, besides £1400 worth of European stores, lay smouldering on the ground, and practically every hut, office, and store had gone. The native foods could not be replaced. Luckily some European stores were arriving from the east, and in a few months we knew that we would only be 350 miles from railhead.

Grey was very much upset on his return two days later, and promptly sent for the Chef-de-Zone to investigate the cause of the outbreak, so that there should be no trouble in getting the

money from the Insurance Company. The fire had been caused by the assistant store-keeper putting a match to the grass round the camp, a regular and necessary practice in Africa, but best carried out at night when the air is still. The wind was in the right quarter when he fired the grass, but one of those tiny whirlwinds, so common in Central Africa in the dry season, suddenly rose and carried a spark to one of the thatched roofs. The buildings were far too close together—they ought to be at least 150 feet apart in such a country —and the whole of Kambove in a few minutes went "Zipp." Grey dismissed the store-keeper, and the assistant store-keeper, who had a wife down south, was very uneasy lest a similar fate should overtake him; in fact, he quite lost his head in his examination by Captain Ghœur, the Chef-de-Zone, who, by the way, was one of the best raconteurs I have ever met.

Grey started for the south as soon as he had handed over things to Cayley, who had been appointed acting-manager of the Tanganyika Company. On the morning of his departure he called me into his office to talk business. I had already told Grey that I had finished all the draughting work, and that I wanted to get executive work in the field, preferably as assistant surveyor under Hayden. I knew the latter thought well of me, and he had spoken to Grey about my pay; in consequence, I hoped for an increase, as my six months' work had only enabled me to save £7, buy a new shot-gun, and get some necessary clothes and equipment. Grey said that he was satisfied with me, and that in conse-

quence he was making work for me. I was to go out with one of the prospectors and stay with him until I was put on to cut traction engine roads in the Congo. Grey added, "If you can recruit your own labour, and buy food for the men without worrying the Company, it will mean a very substantial increase in pay for you." He advised me not to be so free in expressing my opinion until I had got on better. Finally he handed me an unsealed letter to the accountant. I was dying to look at it, but first I had to decide whether I would stay. I asked Grey whether he thought he would come back, and he replied that it would depend on a lot of things; however, he hoped to return. That decided me to stay. I made one more request. I pointed out the necessity of having a British Consul in Katanga. I asked Grey's permission to write to his brother, the Foreign Secretary, to urge such an appointment, and he gave it. I then rose, shook hands, and wished him a pleasant journey and "safe home."

Outside the office I took out the letter to the accountant. It ordered him to credit me with a bonus of £20. I was heart-broken, for I had hoped for an increase of pay. I walked back into the hut, which Grey was using as an office, and told him that I must refuse the bonus. He asked me for my reasons, and I explained that it was a matter of principle: I had made a bargain to work for £10 a month, and had kept to that bargain. The bonus system was productive of time-serving, I added, and, if I was worth more, let him pay me more in future. Grey said that he

could not pay me more; that it was because he thought well of me that he had made work for me, and added, "You can have this letter back, if you like." I replied, "If you force me to take the letter back it will be to get the money and use it for my trip down south." Grey tore up the letter, and I stayed; but I only saw Grey once again. I should like to see a book composed of the doings of Grey and some of his men. It would be better worth reading than most that are written nowadays about travel and development.

CHAPTER V

Ruwe and West of the Lualaba

George Grey left Kambove in July 1906. We did not know whether he would be returning to Katanga to continue on as African manager for the Tanganyika Company, for at that time certain negotiations were going on between London and Brussels. These negotiations subsequently resulted in the formation of an Anglo-Belgian Company which was styled the Union Minière du Haut Katanga. Looking back on things dispassionately I can see that I ought to have left the Tanganyika Company's service then, but unfortunately I had seen Kambove mine, and also had had every bit of information, dealing with mineral discoveries, through my hands.

The morning after Grey left I tidied up the maps and my drawing office and handed everything over to Douglas. After lunch I struck my camp and trekked to the Jilomba River. It was evening just before sundown when I got into camp. Several natives who were travelling came and joined my carriers for the additional safety that the camp of a white man with a good reputation afforded. An incident occurred which I very much regret. I was having a cup of tea, and I

took Rickytikky, my mongoose, out of his box. Like a mad thing, in his delight at being free again, he rushed off to where some natives were making shelters. One boy, not knowing he was a pet, chopped him in two. Perhaps I was rather brutal, but I was very much cut up. I put the boy down and gave him twenty-five lashes with my sjambok. This was the first native I flogged in Katanga. It was a wrong, vindictive action on my part, and I regret it. My only defence is that it was my camp, and that the native was in it without my permission.

I started early on the second day of my march hoping to overtake Captain Ghœur before nightfall. I knew he would be travelling slowly, as his soldiers had far too many women and small children to march fast. At eleven I reached the Dikulwe River, and made the acquaintance of a most interesting chief, Nkuba. I lunched just outside his village, and trekked on another 13 miles before dark, doing 26 miles that day. About 4 miles before I halted was a big swamp over which both the Company and the Belgians had wasted a lot of money. We had cut a deviation road about 9 miles long to go round the head of it, and the Belgians had made flimsy bridges, one after another, across the swamp, all of which had given way and sunk into the mud. When I was road-making later on I had a lot of trouble to be allowed to tackle the swamp. However, when I did succeed in getting permission to put it in order, in one week I fixed it up in such a way that it never gave any trouble again.

On the third day of my trek, about an hour

after I had started, I ran into the Belgian troops and their camp followers. There were about two hundred soldiers and a fabulous number of carriers, women, and children stretching in single file over 7 miles of road, all walking at a snail's pace. It took me over three hours to get past them. At the head of the caravan was Captain Ghœur, the Chef-de-Zone of the Haut Luapula Zone of Katanga. Together we walked the remaining 5 miles into Chilongo.

Chilongo was our half-way station on the Kambove-Ruwe road, and was in charge of an Atonga Capitao named Job. Ghœur, to my surprise, shook hands with him. This is the West African way of treating natives, and totally opposed to all the ideas of South Africans, who insist on the native making whatever is the recognised salutation they give to their great chiefs. This salutation varies from the Zulu greeting of raising the right hand above the head with the words, "We see you," or "Chief," to the *kandalama* of the non-fighting races of South Central Africa, who approach their superiors, sitting on their haunches and clapping their hands.

I liked Captain Ghœur very much. He was a man of good family and an officer of the Belgian Artillery. Before going to the Congo he had been lent by his Government for seven years to work on the survey of Brazil. Ghœur had with him nearly two hundred soldiers, and was relieving the various garrisons in the zone and taking back the men from detachment duty to retain at their headquarters at Lukafu. In the few days that I was with Ghœur I had a good opportunity of

studying the Congo troops. They were composed of excellent material, but unfortunately their discipline had suffered by not having a sufficient number of white officers, and because most of the officers they had were not of the right class.

The agents of the Congo Government and of the Comité Spécial (a sort of chartered company) that was running Katanga were really well treated in the way of food, drink, and equipment by those who sent them out. It cost the Tanganyika Company roughly £7, 10s. to feed each white man for a month. We were allowed not more than ten tins of meat and twenty-five rounds of ammunition, and thirty units of luxuries, such as tins of jam, pounds of sugar, tins of milk. We were given 20 lb. of flour, and if we wanted more we had to buy it at the rate of 2s. per lb., and all additional luxuries in proportion, sugar being 1s. 5d. per lb. We also had to buy our whisky, being not allowed to purchase more than three bottles a month. With the Belgians it was very different. True, they did not run their transport well, as we did, and in consequence with them it was either a feast or a famine. Under normal conditions they had just over a pint of ordinary wine a day, four bottles of good wine, a bottle of gin, and a bottle of brandy a month, and they had everything in the way of food and vegetables that a man could desire; far more than they could actually eat. It cost between £24 and £36 a month to feed a Belgian, the cost varying according to the distance his rations had to be carried.

Ghœur invited me to travel with him, remarking that the Chef-de-Zone always had some reserves

of good things; so for three days I enjoyed his hospitality as I travelled with him to Ruwe. I enjoyed his stories even more than the excellent repasts his cook provided—repasts washed down by good claret or good burgundy, an undreamt-of luxury amongst the employees of the Tanganyika Company, for the little wine we had in our own stores was very inferior and cost nine and twopence a bottle.

I remember discussing with Ghœur the way office-boys succeeded, while really good outside men could not make any headway whatever. Ghœur agreed with me, and illustrated my ideas by one of his really witty stories. "A young naval cadet entered the Portuguese navy. He was given clerical work at the Admiralty. Without ever having boarded a ship, he gradually climbed to Lieutenant, to Commander, to Captain, to Admiral. When the King and Queen of Portugal took a trip to Tangier so well was he thought of that he was charged with the duty of taking them there. The Captain of the man-of-war on which our office-boy Admiral had hoisted his flag asked for the order of departure. The Admiral replied, 'You know your business—give the order.' As they steamed out to sea, the Captain asked for the course. 'You are capable of setting the course?' said the Admiral. 'Certainly,' said the Captain. 'Well, then, set it.' Later when they were taking the ship's position, the Admiral was handed a sextant, and he made a pretence of observations, and then pretended to make calculations. The Captain approached him, showing his calculations giving

the latitude and longitude. The Admiral glanced at them and said, 'Excellent—they almost agree with mine.' On the arrival at Tangier the Captain was getting a little tired of the office-reared Admiral, and asked for orders for anchoring. The Admiral tried his old tricks—'You know your business'—but the Captain asked the Admiral point-blank how many cables he should put out. Here was a quandary. The Admiral scratched his head, and determining to be on the safe side said 'All.' The Captain, cursing the Admiral under his breath, turned to carry out the order. All that day the Portuguese sailors to the jeers of the crews of the foreign battleships toiled at putting out anchors till the Portuguese boat looked like the centre of a spider's web. That night it blew a hurricane such as had never been known before or after at Tangier. The English cruiser, who unlike the rest of the foreign ships had steam up, slipped her cable and stood out to sea in the teeth of the gale." Here I interposed. "Vous flattez les Anglais, monsieur le Commandant?" "Jamais de ma vie, c'est votre esprit, vous autres," protested Ghœur. "The French, German, and Italian vessels could not ride to their anchors, and were driven on to the beach. The Portuguese vessel rested like a seagull on the waves, unheeding the tempest. They gave the Portuguese Admiral the highest orders they had to bestow, and made him Commander-in-Chief of the Portuguese navy, and every one said, 'What a head! What a head!'"

On our third night together Ghœur and I halted at the Lualaba, and I had my first view

of the mighty Congo. I had seen the Congo once before, after leaving Kansanshi. In fact, I had jumped it, for there it was only a little stream a few feet wide. It was a very different story at the Mwamvwe crossing on the road to Ruwe, where we kept a punt that would hold about forty men and two native dug-outs. The river was roughly 100 yards wide here, and nearly the whole afternoon was spent in ferrying Ghœur's soldiers, their women, and the carriers across. The river there was too deep to ford, and, being full of crocodiles, was not very safe to swim in.

Crocodiles were not things to worry George Grey, who, as far as my knowledge went, feared nothing but wild dogs. I may mention here that I am frightened of nothing but precipices and lightning—things no one can put up a fight against. Grey, one time on arriving at the Lualaba—before we had a pontoon on it—found three T.C.L. men waiting to cross. The dug-out was on the far side of the river, and the boys in charge of it were out gathering wild honey instead of attending to their work. Grey, without saying a word to any one, took off his clothes, swam the Lualaba, and brought the canoe back with him. The same thing once happened to me, the boys in charge of the boat being out hunting, but I was running no risks in that crocodile-infested river. I posted my shooting-boy on the bank with one of my rifles and orders to fire if a crocodile came near us. I gave another rifle to my capitao, who was an indifferent shot, and told him to fire only if I was attacked; then, with half a dozen volunteers

from my working party, I plunged into the river and, making as much noise and splashing as we could, swam across in safety.

On our way to Ruwe I witnessed an impressive ceremony. A local big chief, who lived 5 miles out from Ruwe, received the official recognition of the Belgian Government. A temporary flag-staff was erected, from which flew the blue flag of the Congo, with its golden star. Round the flag on three sides of the square were formed the Belgian soldiery. The chief, who had arrived with his present of fowls, eggs, and flour for his Belgian master, was warmly received and greeted with a hearty handshake from each Belgian present. Ghœur, through an interpreter, addressed the chief in stirring language and tied a silver medal as big as a soup plate round his neck. It was all very inspiring. After the parade was dismissed and the Belgian officers had resumed their journey, Ghœur's kitchen-boy beckoned up the now recognised chief, told him to hold out his loincloth, swept a few crumbs of biscuits into it, and handed the delighted old man an empty bottle that contained a few dregs of port. It seemed very ridiculous after all this show, especially as he came and grovelled on the ground to me and called me his lord Chingala, and tried to sell me a black wife.

I was only in Ruwe a few hours before going to my work. While I was there I had a lucky escape from killing a Belgian soldier. The road up the hill to the camp made a sharp turn almost at right angles to pass a projecting rock. There was a trench to carry off flood water beside

the road, on the same side as this rock, and just before I got to the corner I saw a green mamba, a most deadly snake, in the trench. I grabbed my shot-gun from the boy, who was behind me, and fired down the trench. As I pulled the trigger a Belgian soldier rounded the corner not 25 yards away, and the shot must have ricochetted all round him. He turned and passed out of my sight in a twinkling. I rushed round the corner, expecting to find a corpse. However, he was legging it as hard as he could, and evidently uninjured. I do not think I ever saw a man run so fast.

Of course, if I had killed him it would have been an accident, and in any ordinary country I should have received no punishment whatever beyond a possible censure. Under the Congo laws the least punishment that I could have received for *homicide involontaire* was three months' imprisonment and a £20 fine. This ridiculous law had evidently been the work of some bright office-boy in Brussels, and its cause was not far to seek. There had been several cases of the killing of natives by white men who were either incompetent or rapacious, in carrying out what would have been the ordinary police work of a British colony. The Congo courts knew these cases in and out far better than our missionaries, and were loth to convict a man of either murder or manslaughter. In consequence men who were responsible for taking human life often got off without punishment. To secure punishment in such cases Brussels made the accidental killing of any one a punishable offence.

After having made the acquaintance of the six or seven white men working at Ruwe, I went out to join Dave Le Page, who was prospecting a short distance west of Ruwe. It was a real treat to be again in country free from tsetse fly, for the whole of the high country west of the Lualaba (Congo) River was clear of this pest. Some day the whole Congo-Zambezi Watershed from Ruwe westward, one of the vast great grazing areas of the world not yet taken up, along which in a year or so will run the first trans-African railway—from Beira to Benguela—will become, like Uganda, the home of a white race. If I had not been "out" with the manager of the Tanganyika Company this prospecting could have been an ideal life. Le Page and I got on very well together, and he was a really brilliant man for finding gold. Although the district had been thoroughly prospected before, Le Page and I found two new copper mines and two small gold propositions—propositions too small for a big company to handle.

Le Page's method of prospecting was simple. At six o'clock in the morning, after an early breakfast, he left camp followed by about forty natives, each carrying seven or eight strong canvas bags. Le Page followed outcrops of rock, and as he walked below each outcrop every hundred yards or so he would make a cross on the ground with the heel of his boot. The leading carrier would immediately dig a hole, fill up a bag, and put the first of his sequence of leaves into the hole and into the bag. Before going out, Le Page had told off his boys to pick leaves from different kinds of

trees, and each boy had a sequence of so many leaves to correspond with the number marked on each bag he was carrying. At midday we went down to water to make a cup of tea, and eat our lunch, and let the carriers cook their midday meal. After lunch, Le Page panned each sample. If there was a little tail of gold in the pan when all the earth had been washed away, Le Page counted the number of leaves in the bag, noticed what kind of leaves they were, and promptly asked the boy if he could remember exactly where the hole was. In the afternoon we would return to the good holes, which we identified by the kind and number of leaves, and collect further samples of the ground all round them, which we panned when we returned to our own camp at night.

Although Le Page and I had four different camps in the west Lualaba district we were never very far away from either Ruwe, the local centre, or Kolwezi, where the experimental smelting operations were being carried out. The smelting experiments at Kolwezi had been most satisfactory. A year before, Ericksen had gone down south to bring up the small water-jacket furnaces that had been made at Kimberley for the Company. I took a keen interest in these copper smelters, for Ericksen had been just ahead of me on my road up at the time of the great starvation. These little water-jacket furnaces were on the exact pattern of the enormous water-jacket furnaces that are used by the large copper-smelting outfits in America. They only held a charge of 900 lbs. of ore, flux, and fuel. Being so small

they used to get cold easily, and the whole charge inside would "freeze" into a solid mass. The furnace had then to be taken to pieces and the contents hoisted out. They caused such a lot of work and trouble that the use of them was given up.

When I visited Kolwezi they were using furnaces constructed of large bricks composed of powdered ant-heap. These furnaces were much more successful. One of them, after having been warmed up, actually lasted continuously day and night for five days before it burnt through on one side. At Kolwezi they rang the changes, so that one furnace was being rebuilt while the other was smelting copper. They had a mechanical blower to work the draught for the furnaces. This blower was worked sometimes by a small engine which had been got up to drive the little three-stamp battery on the Ruwe reef. Sometimes it was worked by a big water-wheel which had been made from materials on the ground. When I visited Kolwezi they were turning out about half a ton of pure copper a day.

Before I left Kambove I had got thoroughly "out" with the assistant manager of the Company, who was in full charge now that George Grey was in England. As I was finishing the compilation of my big map, Cayley, the assistant manager, brought me several specimens of his own mapping work. I declined to make use of them, and he asked me why. Taking one of his maps I proved to him conclusively that he had made an observation for latitude 11 miles out, and had fudged his work to agree with it.

I had put my whole heart into the map I compiled, and did not mean to have any inaccuracies on it whatever. It was certainly not a wise thing to do, to tell an ex-naval officer that he could not make the simplest astronomical observation accurately. But that is my way. I am always direct, and my directness has sometimes made me friends and sometimes enemies. It took Cayley quite a long time to forgive me for what I had said to him.

Cayley had a hard job in succeeding a wonderful man like George Grey, and he did his uttermost to set the example of unflagging energy that had characterised Grey.

He detailed me to set 70 acres for systematic prospecting, and I determined to show him what I could do. I caught four raw native workers, took them down to the saw-pit, and put them on to making 300 pegs from the waste wood lying there. I then went round to the forge and got 2 feet of inch iron, which I cut into five pieces; these I hammered into dies of the roman numerals C L X V I., which after I had forged them I sharpened and tempered. The next morning before eight o'clock I had numbered and bound into lots of ten, 300 pegs. I then ran a line of 1000 yards, parallel to the Ruwe reef, on the edge of the escarpment; then I chained down the hill, "stepping" the tape with great care until I got down on the flat 100 feet below, and 1000 feet away from my first line. Having put on the other two sides of my oblong figure, luckily closing without an error, I then went to work as hard as I could, and got all the pegs in, 100 feet apart, except those

on the lower ground, which I put 200 feet apart. I then went up to my hut and drew a beautiful plan of the ground with numbered pegs on it. And I had the satisfaction of knowing that I had done exactly seven times as much work as the former local manager assisted by a white man had done in the same time. I was simply forced to show the local management of the Tanganyika Company that I was a great deal better man than they gave me credit for, for unlike the other employees of the Company I had no protecting agreement.

At Ruwe the "placer" was not true alluvial gold, but was merely gold which had been shed from the wonderful Ruwe reef, which contained seventeen different metals in it. After the discovery of Ruwe the first attempt at working had been to carry the gold-bearing ground below the hillside on the escarpment down to the little stream called the Kulumaziwa in native baskets. Then they built wood slides down the hill, and slid down big boxes holding about a couple of tons of dirt to the water. For want of a better name the natives called these wood boxes running on the slides motor-cars. It used to be quite funny to hear a boy whose only covering was a bit of bark-cloth call out, "Look out, motor-car coming."

When I was at Ruwe they had steel rails and trucks which had been brought up by the wagons, a 1200-mile journey through Portuguese Angola. Parallel sets of rails had been laid straight down the side of the hill, which was on a slope of about one in eight. We rigged up a mechanical arrange-

ment so that a loaded car going down would bring up the empty car. Unfortunately we had no proper cable for working it. The cable we used was about as thick as a man's little finger, and to work our machine we had to use roughly about 800 yards of this cable, which we jokingly described as "champagne wire." As it needed very great care in stopping these trucks going down it was necessary to put a white man to work the machine until the stronger cable we had ordered from the south arrived, 400 miles from railhead.

I was put on at the headgear to run this thing. It was a pretty risky game, because there was a crowd of boys working below the gantry at the end of the rails, shovelling dirt into the sluice-boxes. At first when a wire broke, and it used to do this pretty frequently until I got to understand how to stop the trucks, we signalled by raising a flag to a boy on guard by the workers who gave them a shout to bolt. Then we got wiser, and we put three boys either side of the rails about 100 yards apart, each with a log of wood. The moment a cable broke my signaller raised his flag and the six boys on guard each threw his log on the rails and ran. This obviated any danger to the workers below. The doctor came down one day, and his dog, a little fox-terrier, foolishly ran between the rails. I would have willingly put on the brake sharp and smashed the cable, if this would have turned the truck off the rails, but its position at that moment did not permit of it, and I had merely to watch the doctor waving his hands and shouting. As luck would have it, the dog crouched down between

the rails, and the car passed over without hurting him. Poor little Punch, he had been fated to die, for that night a hyena came into the doctor's house and walked off with him.

About three weeks before I left Ruwe a dramatic discovery was made by Massey, our Canadian doctor. We had been recruiting native labourers from the Baluba nation, who lived on the banks of the Lualaba (Congo) River, 100 to 200 miles north of Ruwe. We knew that the activity of the Belgians in opening up the Congo basin north of us was spreading that great curse of Africa—sleeping-sickness. Massey, by making examinations of about 100 native workers, found 18 per cent. were infected with the *Trypanosoma gambiniense*, the micro-organism that causes human Trypanosomiasis or, as it is better known, sleeping-sickness, of which a short account may be useful.

The reason why I had to go on foot up to Katanga was that a very great deal of North-Western Rhodesia was infected by the common tsetse fly of Africa, *Glossina morsitans*, which in the south is known as "fly." In "fly" country there are no domestic animals. If horses or cattle enter "fly" country they die within a few weeks. Donkeys generally manage to live to the beginning of the rainy season. The deaths of domestic animals are caused by a microbe (Trypanosome) known as the *Trypanosoma brucei*. The wild game have this microbe in their blood, and are not affected by it. The tsetse fly bites the wild game and carries the infection of this microbe for forty-eight hours after biting. The infected tsetse

carries the disease to domestic animals brought into "fly" country. Shortly afterwards the animals become lethargic and emaciated, and die of the disease which in South Africa is known as Nagana. Men and monkeys do not get Nagana however much they are bitten by the common tsetse.

The microbe that causes sleeping-sickness is very similar to the microbe that causes the deaths of cattle in "fly" country. The sleeping-sickness is carried (there are other carriers, but they can apparently be ignored) by the water tsetses, of which there are several varieties, the principal variety being the *Glossina palpalis* and its congener *G. palpalis Welmanni*. These water tsetses are only found on the forest-clad shores of the big water-ways, and about 200 yards from them, and are not found in high country or far south. Their limit may roughly be defined as where the West African fauna ends and the South African fauna begins. Therefore the long, narrow plateau that for 1700 miles stretches east and west across Central Africa, the great Congo-Zambezi Watershed, has no danger from sleeping-sickness. Nor has the great Copper Belt of Katanga, which is geographically part of this plateau country. But the districts from which must be drawn much of the labour supply for the Copper Belt are by no means safe, and the routes from these districts are infected.

The ordinary man in England has not the slightest idea about sleeping-sickness, and he imagines that people go to sleep. The term "sleeping" is a misnomer, the symptom sleep being usually absent, except occasionally in the

last stages of the disease. Human trypanosomiasis, as sleeping-sickness is rightly called, can be detected in its earliest stages. The first symptoms are small swollen glands in the body. The glands in the neck are the best to examine. Every white man, therefore, in sleeping-sickness country, or in the vicinity of it, should once a week feel the necks of all his native labourers, and also feel in the hollows of the collar-bones. If he detects the existence of a hard lump, however small, he should either turn the boy out of his camp or, better, send the boy to the nearest doctor to have his blood examined. The next stage in sleeping-sickness after the swollen glands is mild fever that does not yield to quinine; then comes a great craving for animal food, followed by lethargy, emaciation, and death, the symptom sleep being more often absent than not.

There is no actual cure for sleeping-sickness, but Europeans can be kept alive and in good health by carefully ringing the changes on a series of drugs, all of which are cumulative poisons. Once natives are affected with sleeping-sickness practically nothing can be done. However, measures can be taken to prevent them ever getting sleeping-sickness. This can be effected in two ways. The first way is to persuade the natives to leave the big water-ways and live in the higher country, or, failing persuasion, to burn water-side villages and destroy the native boats. The second way—and both methods ought to be employed—is to clear every bit of vegetation for a circle of 300 yards radius wherever an important route crosses a big river.

The management made an attempt at first to conceal the outbreak of sleeping-sickness, but luckily there was amongst the white workers the strongest feeling of loyalty to the British South Africa Company, and several men openly said if the Chartered Company were not at once informed they would take the law into their own hands and notify the B.S.A. Company. I became aware that something was wrong by noticing a crowd of our Baluba native workers waiting outside the house of the little detective engineer, a Belgian in the employ of the Comité Spécial, to whom we announced all our discoveries. Now our native workers were well fed and well treated, and I knew that they would not go to the Belgians unless they had some serious complaint. It was then just after sundown, and I was coming back from shooting. I felt it was my duty to the Tanganyika Company to find out what our men were complaining about. Going up to Manfroi, the Belgian engineer, I told him that with his permission I wanted to be present, and he willingly agreed. The natives complained that our doctor had been feeling all their necks, and from certain boys had drawn blood. Manfroi went up the next day to see the local manager. The outbreak of sleeping-sickness could no longer be concealed.

Letters were at once written to the Government of North-Eastern Rhodesia; for we had a large number of their Awemba natives employed on the "shed-gold." Little Billen and Gillespie, the store-keeper, were told off to take back at once all the Balubas to their homes. Of course

there was no danger of the sleeping-sickness spreading from Ruwe; for all the country round was free from tsetse fly, and we all knew that the carriers of sleeping-sickness were the water tsetses, and in a less degree the common land tsetse, which is known everywhere in South and Central Africa as "fly."

The absence of two white men did not interfere with our work on the "shed-gold." The good ground was giving out, but the stuff we were then taking out was exceptional. I was in Ruwe about six weeks in all, and during that time we won close on 1500 ounces of gold or over £6000. Our gold, it is worth remarking, on account of its purity and softness, was purchased by jewellers for a little over £4 an ounce, which is rather more than its intrinsic value as coin. In all, some £100,000 was won from Ruwe. The gold won did not benefit the employees of the Tanganyika Concessions or the shareholders much, for the lion's share went to the Belgian financiers, who only put up £3000 a year for development work against the Tanganyika Company's £38,000. Every bit of that £38,000 was wanted, and if Grey had only been allowed a little more money the Tanganyika Company would have been in a very different position to-day. I mentioned that west of the Lualaba was entirely free of tsetse fly. We had 14 head of cattle in Ruwe, and every day were able to have fresh milk with our tea. There was no question of cattle not being able to do well in that high country.

The chance to buy 4000 head of cattle came the beginning of 1906. When King Lewanika

of Barotsiland found that the King of Italy's award had put half his territory into the hands of the Portuguese instead of the British, whom he recognised as his paramount overlords, he had all his cattle driven from Portuguese territory into the British sphere. Lewanika liked George Grey, and offered Grey 4000 head at bargain prices—I think for £8000 cash. Grey sent a man down to get them, but as the directors of the Company were using all the Company's money to start their port of Lobito Bay and the railway, they refused Grey's request for this amount of cash. Had Grey got the cattle he would have brought them up by a roundabout way to avoid "fly," and put them out west of Ruwe. Allowing for normal increase, that mob of cattle would be now (1914) over 25,000 head of cows and heifers, and we would have killed and sold about an equal number of beef animals. The value of such an investment, which would have cost in all £10,000, would in six years become quarter of a million sterling.

I write this because I know the money there is in cattle, and if I could only get any one to finance me I would to-morrow go out to the Northern Interior of British Columbia and start. I mention here that the only three grazing areas of the world left are the Northern Interior of British Columbia, some of the Southern Argentine, and the great Congo-Zambezi Watershed country.

CHAPTER VI

ROAD-MAKING

ONE Sunday the mail brought me a letter from Cayley ordering me to Kambove, and in less than six hours I had got carriers and done some 14 miles of my journey. On arriving at Lualaba (Congo) I found Manfroi, the detective engineer, camped there. He had been having great fun shooting at crocodiles, and had succeeded in bagging two. Together we took our punt and poled up the river a mile or so to look for puku, the small marsh buck that runs in herds on the grassy flood plain and in the Ketila salt marsh adjoining.

Manfroi would stalk in the open with a white helmet on, and needless to say the wearing of the white helmet, together with his ignorance of the method of silent stalking, prevented his efforts being rewarded with success; for he was forced to take very long shots. After that, we went fishing—with dynamite. I was sitting at one end of the punt, with my shot-gun across my knees, and Manfroi at the other. Generally I am very observant, but I had carelessly failed to notice that the fuses which Manfroi had fixed in the detonators were only a few inches long. Presently we came to a big shoal of fish. Manfroi

ordered the native paddlers to stop, shoved a fused detonator into a stick of dynamite, and then lit the fuse. He was holding the burning fuse with its dynamite over the side waiting for a good chance to drop it. Suddenly I noticed the shortness of the fuse—fuses run sometimes—and I shouted to him to drop it. He turned to me with a "Pourquoi?" I gave my order firmly and quickly, and at the same time turned my shot-gun on to his hand. Luckily he dropped it at once, otherwise I should have blown the dynamite cartridge into the water, and probably his hand with it. There are quite enough risks to life without Europeans being foolhardy. The cartridge had not been half a second in the water when the muffled explosion took place and a dozen or more fish floated bellies upwards. Such an action on my part did not tend towards popularity. Still, I saved both our lives.

Needless to say, I did not camp with Manfroi that night. My reason, which was a true one, was that I wanted to break fresh ground. I mention here that I attribute much of my good health in Africa to religiously refusing to camp in old camping-grounds. My journey to Kambove was uneventful. I saw no game, and consequently no tsetse fly.

In Kambove I found a letter from Cayley, who was away. He ordered me to get thirty boys and clear a 3-foot-6-inch bicycle path following the roughly blazed trail that Hayden, our surveyor, had selected for our traction engine road from the south. As we expected the railway would come up this way, I was really glad to be put on the

work, from which I felt that I should gain useful knowledge and experience. Besides, although the work was seemingly unimportant, yet it was executive work, and in consequence I took orders from no one except the manager.

I arrived in Kambove on a Friday evening, and on Saturday I went out and found the point on the spine of the plateau 600 feet above Kambove and about 3½ miles away from the old burnt-down headquarters. Here Hayden had begun to blaze. I hunted round for water in the gullies that broke down from the spine, but as it was the end of the dry season none of them had water in them. On Monday I took out my working party, and we spent the day making hoe handles, axe handles, ranging poles, pegs about a foot long—each boy making twenty—and some 300 yards of bark string. Tuesday and Wednesday resulted in less than a mile each day. On Thursday I moved out to the 7-mile water on the Mura-Dikulwe water-shed, and did about half a mile of road. On Friday I got about a mile done. In the evening, one of the working parties disobeyed my orders and left its pegs behind at night. I ordered them to return and get them. They refused. I told them they would have no food unless they obeyed, which they finally did with a very bad grace, for they did not relish walking 4 miles after a hard day's work. On Saturday there was a mutiny. A very intelligent Awemba, named Charikosa—my party were all Awembas—and a big native who was a regular "old soldier and a sea-lawyer" were the ringleaders. I got ropes from my tent, caught the sea-lawyer, roped him under the arms and round

the neck, and taking a small native axe in my hand I made him take his hoe and start scuffling, while I stood over him with the axe in one hand and the rope that held him in the other. The boys came round and made cheeky remarks. I laughed, and said they could go into Kambove, and that I and my tied-up friend would make the road together. Gradually they dropped being rude to me, and started chaffing their brother, my prisoner. Then one by one they took up their hoes and axes and started work—Charikosa being the last to do so. After that I never had any trouble with the boys, who were a willing and cheery lot.

I took quite a liking to Charikosa, who was a chief's son, and who had the high qualities of a good leader, and after a little while I dismissed the idle and incompetent Wasenga capitao (foreman) who had been given me, and promoted Charikosa to his place. My first week's work was very unsatisfactory, as I only did 4 miles. My second week was better, as I divided the boys into parties. To myself I gave two boys for alignment work. They carried my sixty alignment poles, light, straight wands of young magnolia, sharpened and burnt at one end, and with a bit of calico at the other. As I walked along I counted twenty paces, and took a pole from a boy, and planted it in the ground. When I had done about 600 yards I stood with a flag in my hand. The two alignment boys stood each at one pole. I signalled if they were to let it stand or knock it down, each boy in turn running on to the next pole. Then they came back, and according to my signals put in each pole in the alignment. Following the

alignment boys was one boy whose duty was to go back and bring up pegs and sow them two at each pole and two between. Following him was a boy with a mallet and a tabwa (or measuring stick) 3 feet 6 inches long. He took out each pole, and put a peg in its place. Then he laid his tabwa against the peg on the ground and hammered in a peg at the other end. He also put in pegs in the same manner. Behind him came my two string boys. They put bark string round each peg, and passed backwards and forwards fetching up string. Then came four boys cutting with hoes on either side of the alignment, with their feet either side of the string and walking backwards. Then came the scufflers fourteen strong under the capitao. Behind them were the stumpers nine strong. My two alignment boys, the two string boys, and myself acted as axe-men, and cut down all trees and shrubs between the lines of string.

We put in a good day's work each day. I blew a long whistle at half-past five, when the boys turned out and cooked their breakfast. At five minutes to six I blew three sharp, short blasts, my alarm signal. At six I blew a call for "Fall in!" We worked till noon, when we had "Lupenga," or the hour's rest for the midday meal. We fell in again at two, and worked till five or six, according to our distance from camp. The second week gave me a great deal of trouble. However, I had a fairly satisfactory week in spite of having to carry water, and did in all about 6½ miles. On the Saturday I gave each boy a yard and a half of calico, and sent them out to buy

their week's food from the villagers in the Dikulwe Valley. They had no trouble in finding their way, as the watershed along which I was running was only about 300 yards wide, and stood 100 feet or more above the rest of the country. From it we commanded a good view of the Dikulwe and its tributaries flowing north and the Mura flowing east. There were very few villages in the Mura Valley, but we could see the smoke rising from a dozen or more villages interspersed among the tributaries of the Dikulwe. On Sunday a pretty kettle of fish faced me. The boys came back without food, and told me that all the villagers had fled into the forest, and that the Belgian soldiers were living in villages and insulting the women. The women were too frightened to grind food or to sell it. Later in the day Luendela and seven of his people came in and told me that the "Stonebreakers" (the Belgians) were seizing men to work. Needless to say, I at once sent into Kambove a party to fetch food. I also expressed strong opinions about the way the soldiers were collecting the labour tax.

On paper the labour tax appears to be ideal: a native is required to work at the rate of four days in each month for the Government. If the Government do not require the labour they allow a concessionary company to make use of it. The native is paid for his work. Contrasted with this is the hut tax, which prevails in British territory. Under this system a native is required to pay a fixed sum each year, which varies according to the cost of labour in the district; it does not matter how the native earns his money, whether

by working for white men or growing an extra amount of food to sell. All our Government insists on is that he must pay it or be put in prison. In the controversy about the so-called Congo atrocities, conflicts between our armed police and the natives have been cited when the hut tax was first put in force in North-Eastern Rhodesia, and I must admit that there is generally a great deal of trouble in levying a hut tax at first, and there is also trouble when it is increased.

When a labour tax is put on, the Government have no trouble whatever at the start, for the native comes in, does his work, and is paid for it. However, the labour tax very soon becomes irksome to him. Perhaps he may be only called upon four times in the year, each time to work for twelve days, perhaps every month a bullying native capitao will be sent down to make him do his four days' work, thus preventing him from being free to attend to his gardens or make a long-time engagement with a white man. Another ridiculous thing about the labour tax is that some well-meaning stay-at-home Belgian devised a system of converting labour into supplying the same foods for the whole Congo, and ignored local conditions. Such a system was a farce when labour at the rate of a halfpenny an hour could be converted into eggs, which might be plentiful or the reverse. The worst phase of all in the labour tax was furnished by the Belgians themselves. Incompetent agents whom the natives laughed at could not make them pay their share. Again, strong men who were scoundrels made the natives work far longer periods than the

law allowed, in order that they (these white agents) might get substantial bonuses for a large collection of rubber. These two classes of men caused what would have been police work in an ordinary country to be punitive work in the Congo. It was the punitive work carried out by the rabble native soldiery that brought the Congo Government into conflict with every Church in Christendom.

I am (or rather was then) quite an authority on the Congo laws and taxes, and a year and a half later, owing to the demand for written copies of the little synopsis I had compiled, I published it in the *Bulawayo Chronicle*. They sold out the edition it was in, and reprinted it in another edition. I conclude, therefore, that it had some value, and that a few notes here will not be out of place. I give building taxes, labour taxes, custom duties, and laws about arms as they then were.

The Government of the Congo State levies taxes, which are due on the 1st January each year, on European dwellings, stores, etc., of one franc a square metre; on kitchens, servants' quarters, etc., seventy-five centimes per square metre; on domestic offices, fowl-houses, etc., fifty centimes a square metre; if the area on the 1st of April exceeds that on 1st January a further return must be rendered and the additional tax paid. In measuring up house areas the over-all dimensions are required, and include verandas.

The heaviest tax levied by the State is a tax on labour employed. The Belgians certainly have some wonderful ideas in mixing up the levies by the State and the levies by the Con-

cessionary Companies; for instance, the State demands ten francs for each local native employed and twenty francs for each foreign native employed. The return for this tax is a return of the gross number, and the names are not furnished in actual detail. The Concessionary Company demands an annual licence of sixty francs for each native foreman, who is not allowed to have more than twenty men under his command. This licence is for thirty francs if for under six months. The Concessionary Company also demand returns giving the names and villages of all native workers. These are required half-yearly, and the tax for each half-year on each native worker is one franc and five centimes.

The State levies the customs dues, which are 10 per cent. *ad valorem* on the European, wholesale price, plus 20 per cent. on all articles imported into the Congo. Mining machinery, steel rails, etc., are taxed considerably less. Arms pay 10 per cent., and must be stamped with the Government stamp on the stock. Permits to carry arms are twenty francs each, and are available for five years, one permit being required for each weapon. If the arm is changed, a new permit is not required, it being sufficient to send the permit with a description and number of the new weapon to the nearest Government official for correction.

Owing to Cayley writing to me that I must not say anything against the Belgians, and also to the necessity of arranging for supplies of food, I took a trip into Kambove, taking my working party in with me to cut the bit of road which had not been blazed. There I had some good news.

Cayley had just received a telegram that the Union Minière had been formed, and that they had £400,000 in cash to spend in development work. I hoped some of this money would come my way.

In Kambove I met Captain Ghœur, who invited me to dine with him and Chkiandi, the Italian engineer, who for £16,000 had undertaken to look for railway routes in Katanga for the Comité Spécial. Without saying anything against Chkiandi I feel that several of our own men could have carried out the work more cheaply, more quickly, and more efficiently.

Of course, I was given an excellent dinner. Early in the evening we discussed routes, and Chkiandi pumped me about the country: later on we got upon the subject of Congo atrocities, which we were at till the early hours of the morning.

The Belgians took very much to heart the mud-slinging campaign that was going on against the Congo Government. Ghœur strongly defended the labour tax, which existed in the Congo, as against the hut tax which prevailed in Northern Rhodesia.

Although we had radically different ideas I felt if the Belgians had sent out more men of Ghœur's type instead of ex-bus conductors, office-boys, and failures in every walk of life there would have been no talk about the Congo atrocities, and Belgians and English would have worked together in Africa for the common good of both black and white.

I left to return to my camp at the 7-mile water before daylight, and consequently missed

saying good-bye to Ghœur, who was returning to Lukafu that day. Chkiandi had done us well with both food and drink, and I was not surprised at the Belgians rising late. However, while at breakfast a runner brought me a letter from Ghœur saying good-bye. The Congo atrocities had evidently rankled, for he wrote:

"I dreamt that your Edward had put the horrible hut-tax on in the Congo, and that your missionaries had got our Leopold locked up in the Tower of Charing Cross.—Your all devoted

"LEON GHŒUR."

A few days after leaving Ghœur, I shifted my camp to the apparent source of the Mura, for its real source was 8 miles farther west, the river running underground, as is often the case in limestone formations. Here I built a two-roomed rest-house, collecting the materials and doing all the work, except mudding up the poles that formed the sides, in one day.

Just before the end of my fifth week I had done 25 miles, with the exception of one mile in the middle of the Mura-Dikulwe watershed and half a mile on the spur of the plateau above Kambove, which I had left on account of water difficulties. I then decided to take all the boys into Kambove, with our hoes and axes, and get food for one month. We left the 25-mile water before daylight, made half a mile of road, and bivouacked at the 7-mile water, where I made a shelter to cover bags of native flour. On the second day we went into Kambove, making the half-mile of road which I had left on the spur, and got our food. It was half-past three when Cayley came up; he complained

of my not being at work. I gave my reasons, and, being very cross, asked him to write me his complaints, as there was a storm coming, and I wanted to get my food into shelter before it broke. I had 7 miles to walk before I reached my shelter at the 7-mile water.

I got to my bivouac just in time to save the floor a wetting, and we had an uncomfortable night sleeping in the rain, with bits of bark for shelter—fire having destroyed all the grass round, and there being no leaves on the trees. It is just for about one fortnight in the year—at the beginning of the rains—that the trees are without leaves. On the third day I reached the rest-house, making the last half-mile of road on the way. I think I have reason to be proud of these three days' work. With thirty natives I had aligned, scuffled, and stumped 1½ miles of road. We had travelled 50 miles and transported three-quarters of a ton of food 25 miles.

I obtained some bits of news on that trip into Kambove of the railway reaching Broken Hill three months previously; of the failure of Broken Hill Mine, of which so much was expected; of Cunningham being shot by natives in Portuguese Angola; but the saddest thing of all was the news of the death of poor Bracken, whom I had met at Kansanshi on my way up. Bracken was cutting our traction road in North-Western Rhodesia. He had wounded a leopard, whose blood spoor he followed up the next day after lunch. About four o'clock in the afternoon one of the boys Bracken had taken with him came running to the Dutchman who was bossing up the working party,

to tell him that the leopard had got Bracken. The Dutchman, whose name was Rudermeyer, hurried to Bracken as quick as he could. This is the story I heard from him.

"I ran the whole 4 miles with the boy leading me. When I came to the edge of a small vley I saw seven niggers up trees shouting out 'There.' There was a small spruit on the far side of the vley, and by the edge of the bush was a thick patch of undergrowth. A few yards from the undergrowth lay Bracken, with the leopard on top of him. He was feebly hitting the leopard, first with one hand and then with the other, saying, 'Get off, you beast! for Christ's sake, get off.' I did not like to go close enough to kill the leopard for fear of hitting Bracken, so I fired two or three shots from about 20 yards away to scare him. The leopard got off Bracken and came for me, but he was shot through the kidneys badly, and dropped dead before he reached me. I felt I could have killed those boys who spent four hours up trees looking on. They told me Bracken saw the leopard in some thick stuff, and as he was changing his rifle for his shot-gun the leopard charged him, and he fired both barrels in the air."

Rudermeyer carried Bracken back to camp as quickly as he could, and bathed his head. Bracken picked up a little in camp and asked for a looking-glass. Rudermeyer at first refused to give him it. At last to Bracken's insistence he gave way. When Bracken took the glass in his hand and saw the whole left side of his head above the ear torn off, and the brain protruding, he said, "I am a dead man." He then wrote his will, and a letter

home, and became unconscious. Five days later he died in hospital at Broken Hill without recovering consciousness.

I still had 33 miles of road to cut, and as the rains were now on I wanted to finish it as quickly as possible. We then began averaging over a mile and a half a day, except on the days we shifted camp. About 6 miles south from the rest-house I made a pretty bold shift of camp, 13 miles to a small lake which we would call a pan in South Africa. The reason for this shift was that there was such a lot of lion spoor at the next water (a tributary of the Nkando) that I did not think it fair to the boys to camp there. In fact, the day before I shifted I ran into a couple of lions. It may seem strange that although I had been nearly six years in lion country, and out in the wilds most of the time, I had never yet seen a lion. I was ahead with my two alignment boys. It was about four o'clock, and I had just finished my afternoon's alignment. I left my two boys with my rifle and shot-gun to sit down and enjoy a smoke, while I walked just below the watershed (for this was to be a watershed road the whole way) to see if I could find any patches in the forest likely to have buck in them. I had not gone more than 200 yards when a lion rose about 10 yards in front of me. He had evidently just woke up, for he was blinking his eyes very fast. I glanced to my left and right to see if there was a tree I could climb easily. About 20 yards off on my left I saw a suitable tree. Keeping my eye the whole time on the lion, who still continued to blink, I side-stepped until I

had my hand on a lower branch of that tree; then I shouted for my shot-gun as loud as I could. I heard the answering shout of my alignment boys, and at that moment another lion, whom I had not previously seen, got up. I was in no danger, as I could have swung myself up the tree in a second, and I was now quite 20 yards away from the two lions. As my boys ran up, both lions turned tail and bolted, going away at a pace which surprised me, for I had no idea lions could cover ground at that rate.

A day or so later I stepped on a leopard in the bush when I was aligning. I had a ranging pole, of my own making, in my left hand, and a small native axe in my right. The leopard was going very fast, and the boy carrying my gun must have been 20 yards behind, so I threw the axe I had in my right hand at the leopard. It hit him on the hind quarters and bounced on to his head. He was not 5 yards from me when I threw, and I threw just as hard as I could. It caught him a pretty nasty knock. He reared up into the air with his fore-paws above his head, and then came quickly down again, and ran off faster than ever. He was out of range before the boy handed me a gun.

The rainy season was now properly on, and I made every effort to look after the health of my people. On wet days I knocked off work half an hour earlier and ran them home all the way, leading myself. When we shifted camp I saw that the boys made their shelters watertight. The boys were really good, and so amenable to discipline that I was able to strike camp and move off within

ten minutes of giving the order, and they worked so well when getting into a new camp that they were all able to pitch my two tents and my additional fly, and thatch a roof over them (to prevent the rain waking me at night), as well as hut themselves in fifty minutes. For their work I can take no credit, beyond giving out the detailed orders each morning. They were contented, too, for they got a lot of mushrooms and honey in the forest, while each night I gave an issue of "isichevu," or relish. One night it would be salt, sent to me from the store; another, meat shot by my shooting boy; another, tobacco; another, beans or vegetables, bought from the local villagers, for I had now got in touch with five or six villages in both basins (the Lualaba and Lufira), and none of these villages were more than 15 miles off. I had luck, too, for I had been able to buy forty-two fowls from the villages near in and 60 lbs. of really good rice from farther away.

I had cut about 2 miles past the 48-mile water where I had my last camp, and was returning home at dusk, counting my paces, while the boys behind me kept up a deafening jargon song of Chingala's prowess, when I saw two tents and a lot of natives close to my camp. Harrison, the local manager of Ruwe, and Charlie Grey, the local manager of the Tin Belt, were on their way home to England, taking down £8000 in gold. From an ant-heap near by I heard a couple of shots, and a moment later Grey appeared with a couple of partridges. I walked up to greet him, and congratulated him on his right and left. He laughingly apologised for poaching on my

preserves, for every one in the Concession knew my weakness for birds.

It was a fine night, and we dined in the open, I talking geography, Grey telling stories of the Baluba natives and the big fish in the Lualaba, and Harrison explaining why he had no tumblers for our whisky. A Greek, who had made his living down south doing feats of strength and eating glass, had heard of the wonders of Katanga and had come up to make some money. As Harrison explained, "The swine ate my three tumblers—all I had—before I could stop him."

I sent one of my alignment boys to guide my two guests the next day on to our old road, with which I joined up three days later. I then trekked back into Kambove, making one little bridge and four culverts on my way in, as well as cutting every overhanging branch within 11 feet above the path. Harrison had told me that he would write to Cayley to tell him I was working. I should think I was, for in sixty-one days, with a party of raw natives thirty strong, I had aligned, scuffled, and stumped 58 miles of path (running once 2 miles on one alignment), and done other things as well as getting back into Kambove in that time. The work cost the Company £123. I was money out of pocket.

Such luxuries as claret and tinned vegetables had been a heavy charge on me, and exceeded my pay. Also I paid for Sunday work to the natives out of my own means at first till I got permission to pay them extra from Kambove.

CHAPTER VII

Bad Times

In Kambove, after I got in from my road, I found a letter from Cayley awaiting me. My orders were to hand over my working party, who were wanted for one of the prospectors. I was really sorry to part with my boys, as they were good workers and understood me well. However, I knew of the difficulties we had about labour, as the Government of North-Eastern Rhodesia had closed our recruiting in their territory on account of the outbreak of sleeping-sickness. My orders further added that as soon as labour had been obtained for me I was to go out and bridge the Dikulwe on the Kambove-Ruwe road.

Old Kambove was now quite deserted, and the only men living there were the French secretary, one of the storekeepers, and my friend Eric Douglas. New Kambove, which had been built close by Grey's house at Msesa, was nearly completed. We had to send in returns of the dimensions of the buildings, so Douglas asked me to make a large scale map of both Old and New Kambove and calculate the area of each building.

It took me a couple of days to do my measuring up and mapping work. By that time some boys had come in. They were recruited by the agents

of the Comité Spécial, and this was supposed to be voluntary labour. As many of them desired to go back and hoe their gardens, and, if refused, deserted promptly, I have no doubt they were impressed by the soldiers. I got thirteen boys—not enough for my bridge. As they were untrained, I thought it would be as well to get them a bit into shape before I started work, so I decided to put a frame bridge, such as the Royal Engineers make, over a deep spruit on the road connecting the New Kambove with the Old Kambove-Ruwe road. The spruit was some 200 yards below George Grey's big brick house. I camped by the spruit.

I could not get the natives to handle heavy timbers, so I had to be content with using light ones. As I could not get iron to bolt my transoms to the standards, I had to be content with wooden pegs. We had been accustomed to deck the distance-pieces of our bridges with transoms, touching one another, over which we laid twigs and grass and then covered them with earth. This was a mistake, as it made the roadway too heavy. It took me four days to make the bridge, and I learned several useful lessons in making it. I saw that the decking of bridges must be different, so that all the bridges I made after that one I decked with transoms 6 feet apart, and on them I lashed longitudinally road-bearers of whole bamboos, a bamboo's width apart. The road-bearers I covered with chesses of split bamboo, touching one another. The transoms were fixed on to the distance-pieces with 6-inch wire nails countersunk about 2 inches, or with wood pegs 1½ inches in diameter. The road-bearers I had

lashed to the transoms with well-made bark rope, and the chesses laced to the road-bearers with four rows of strong and thick bark string. This is, I think, the best decking for bridges in the tropics. The life of the decking is from one to two years. The materials are always on the ground. I was the first to introduce this way of decking bridges into Katanga, and my bridge over that spruit was the first frame bridge in Katanga. It was also my first attempt at a double-lock bridge, although I have seen them built in war.

While I was camped there I made the acquaintance of Rudermeyer, who told me the story of Bracken's death in North-Western Rhodesia, an incident which I described in the preceding chapter.

Rudermeyer was an adventurer like myself, but his previous reputation in the south enabled him to command wages two and a half times as much as mine. He had been a trooper in Grey's Scouts—a picked body that did so much good work in the Matabele Rebellion—and subsequently transport-riding in the midland district of Southern Rhodesia. It was as a transport rider I had heard of him. He was travelling in the Sebungwe district down south with a wagon and a span of eighteen donkeys. There were a lot of lions in that country. Each night when he outspanned he made a strong kraal for his donkeys. A lion one night broke through his kraal. Rudermeyer loaded his Martini, and got a candle and lighted it. He went into the kraal and found the lion eating a donkey. He walked up to the lion with his rifle in his right hand. Holding his candle in his left hand, and

balancing his rifle over it, he shot the lion stone dead about 3 yards off. Rudermeyer was a truly brave man, and told me some really good lion stories. I remember one about a wounded lioness which charged him. He hit her twice as she came for him, and dropped her at his feet. He told me that he felt really frightened as she charged, adding, "Man, you should have seen her mouth."

In that camp I renewed my acquaintance with Hugh Frazer, who was our assayer. He was an interesting man, for he had travelled much. He was also very sound in every way. At that time he was extending the cross-cut on the 100-foot level of Kambove mine. He saw that Kambove was bad breaking ground, and that dynamite did not do its work well. He worked, therefore, with picks, and by running three shifts in the twenty-four hours was able at half the cost to drive three times as much as had been done before in a day. Frazer discussed with me the making of a tension bridge over the Dikulwe, and advised me to make it my *magnum opus*. Cayley's orders to me were to make it of the cable that had been used for hauling the *Cecil Rhodes* up her slip.

The *Cecil Rhodes* had been the Tanganyika Company's steamer on Lake Tanganyika. She had been carried up in pieces at the end of the last century—it seems strange being able to talk of the last century—to the centre of Africa, and put together on Lake Tanganyika to be a connecting link in the very visionary Cape to Cairo Railway. As Lake Tanganyika is simply a deep trough, 500 miles long, the wind storms on it at times are

worse than an Atlantic gale. The *Cecil Rhodes* one night was lying in her little harbour without having steam up, and it came on to blow. The holding ground was bad, and in a few minutes the *Cecil Rhodes* was a mass of scrap iron on the rocks.

After the wreck we had sent a white man to get the fittings out of the *Cecil Rhodes*, and he had carried back with him to Kambove—a journey of more than 400 miles—everything that was of value, including 700 feet of wire hawser 1½ inches in thickness. This wire I used in making my suspension bridge over the Dikulwe.

I had by this time collected twenty-four natives, so I started to get the heavy cable out to Nkuba's village. It took eleven boys to carry it, and the heavy winch gave still greater trouble. However, in three days I had transported all my material, my stores, equipment, and myself to the ground which was 24 miles from Kambove. Getting to work was a very difficult affair. I wanted tall columns over which to stretch the cable. There was no timber except a clump of seven exceptionally large magnolias near Nkuba's village. At first I tried cutting down the smallest magnolia. It was 3 feet 6 inches through. I cut a length off it of 20 feet long—the boys were so weak and unwilling that they could not drag it. I therefore rolled it over and over till I got it to the river, and then threw it in. It promptly sank, but as in water it only weighed one-quarter of what it did on land, I thought I would have no difficulty in getting it half a mile up river to the bridge side. In deep, clear water it was easy

enough work, but every 50 yards or so there were shallows, and I had to put the boys in the water to pull. Ten of them ran away the next day. I gave up the idea of using the heavy magnolia timber, and instead cut four nice trees of pseudo-mahogany (one of the acacias). This tree is very common, and is probably, taken all round, the best wood for all general purposes. The borers (little brown wood beetles that fly from place to place) seldom burrow very deeply into it, and the white ants (termites) do not seem particularly fond of it. None of the forest trees run high owing to the wanton destruction by the natives during the annual starvation period, which takes place in late winter and early summer (October to January). Then every male native is out in the woods listening for the call of the honey-bird. When he hears the bird call he gives it an answering call or whistle back, and with frequent pauses to call and be answered, the bird leads him to the tree where the bees are. He then lights a fire and collects a lot of materials to throw on it to make smoke. He then proceeds to chop down the tree to get the honey. Natives in the country of the Congo-Zambezi Watershed are nomadic within a given area, shifting their huts every four or five years. During that period a village with twenty able-bodied men in it will chop down ten big trees a week for three months of the year to get honey, thus practically destroying at least 500 big trees, or practically half the valuable trees in an area of 4000 acres. The white ant makes short work of the fallen timber. The only trees which escape them—and they are rare—are the magnolias.

These grow in swampy ground, mostly at the sources of streams in the high country. The wood is white and soft when first cut, therefore very easy to work. It hardens on seasoning. It is very much heavier than water. Neither white ants nor borers eat it, nor do any other insects. It is almost as uninflammable as the jarrah of Western Australia. It has a greater tensile strength, although it can be crushed more easily than some of the woods that come under the generic description of hard woods. To my mind, although it is at present almost unknown, it is a wood of the highest economic value. I shall have more to say about it later on.

I had got a set of towers for my bridge erected, and had connected them rigidly with their anchors by braces as well as heavy baulks on the Saturday before Christmas 1906. Towards noon on Sunday I was sitting alone in my camp reading, when Cayley bicycled up. I had not a servant about. My personal boy was out shooting with Charikosa, my capitao, and I had just sent my cook on a message. My workers were at the different villages buying food, and even the dish-washer and pot-washer were absent, having my permission to hunt cane rats along the Dikulwe. I was absolutely alone. Cayley was much surprised to find me without any people. I saw he looked shockingly ill, and I spoke to him about overdoing it, telling him that he had not Grey's physique. He would kill himself if he tried to do more than Grey had done. He was annoyed, and told me to mind my own business. I gave him lunch, cooking it myself. I had also a

small bottle of champagne, part of my Christmas present from the Company; I had the greatest difficulty in persuading him to get it down his throat. After lunch he looked better, and together we walked down to the bridge. At the bridge Cayley turned on me and told me he was not going to stand my playing the fool and putting up silly erections; all I had to do was to stick four posts into the ground and sling the cable across them, a matter of a couple of days' work. I tried to explain that the cable and the decking would weigh well over a ton, and that a lot of other things had to be considered. He refused to listen, and I felt I had had enough of bad times, and for the first time for a whole year stood up for myself, telling him I had stood as much as I would stand. "What do you mean?" "I mean what I have said," pausing on every word. I felt capable of anything. The Dikulwe was running like a mill race 17 feet below where we were standing. I was silent and in deadly earnest. Cayley looked at me for nearly a minute and then snapped out, "Don't be a d——d fool, man." I could not help laughing. The tensely dramatic situation was relieved and I saw that all my troubles were over. "Look here, Thornhill, you are working too hard. Give yourself and your boys a holiday, and come and spend Christmas with me." Together we walked across my temporary bridge. Cayley pointed out how he wanted the bridge to be finished, and, although it upset all my calculations, I carried it out his way. I told him about the way the boys had deserted, and added that the Belgians had im-

pressed the labour. We were quite friends, so I did not resent his saying that he would not listen to one word against the Belgians; but he added, "I do not want any South African methods. You must not work your boys so hard." I then made a formal request that in future I should be allowed to recruit my own labour and pay small recruiting rewards to chiefs. Cayley warmly approved, and gave me the permission. When I parted with Cayley I had really good feelings towards him, and I could not help believing that my future in Katanga was assured.

On Tuesday morning, Christmas Day, a native arrived at ten—he should have reached me the day before—with Cayley's bicycle, and I got in just before lunch. Cayley was like a schoolboy, and no longer the slave-driver I had always thought him. My Stetson hat was old and dirty. Cayley asked me how much I would take to let him kick a hole in it. I said a new hat. "Done," said Cayley, and I left him and Frazer playing football with my hat while I walked over to the store to get my new one. Little Francis, the storekeeper, showed me the hats. They were very expensive—£2 each. I took one and, turning to go out, I said, "Put it down to Mr. Cayley." Francis' face was a picture. He asked me for my authority. I told him to do as I said, adding, "I am spending Christmas at Msesa." "You are going to be one of the 'nobs' now," said Francis, "and only a few days ago we were betting whether you would be going south before or after Christmas."

That Christmas was a delightful day's rest.

Cayley told stories of his trip out to the West Coast along the Congo-Zambezi Watershed two years previously, and was very optimistic about the future of Katanga. I saw that now I had got in with Cayley I had better not let him again get the opinion that I was an idler; so on the following morning I went into his room at daylight and told him I was going back to my work. He told me that to save writing orders he wanted me to finish the bridge and then go along the Ruwe road rebridging, and to try and be in Ruwe about the middle of January. I was to put together Studt's geological map, adding, "If you make a good job of it I will give you a really substantial increase of pay." He then asked me if there was anything I wanted. "Only a bicycle to go out on." "Take mine." "The tyres are down." "All right! I'll overhaul them and pump them up while you are breakfasting." As Cayley handed me the bicycle he said, "I think you are better at making others work than working yourself." I parted real friends with Cayley, and felt very hopeful. That was the last time I saw him—and Frazer, too. Frazer got the offer to run a big mine down south. Always fit and in the rudest of health, he left at once on his bicycle, with a bag of shillings to secure food and services from the villagers *en route*. I believe he beat George Grey's record, for he did the 350 miles on native paths to Broken Hill in four days, sleeping only three nights on the road. I think the Tanganyika Company were exceptionally lucky in having such good men.

The bridge over the Dikulwe I finished in three

or four days after my return, and I had a visit from my friends, Dave Le Page and Mike Furlong, who were thinking of getting out of the Concession and going south. Slowly I trekked on to Ruwe, repairing and redecking a bridge every two days. Ruwe, which I found much changed, was now a very happy camp. Harold Cookson, the local manager, a man of real ability, was very popular with every one. I fixed myself up in a hut, for I was tired of camp after working in the field with the rains hard on, wet through morning and evening. I may mention here that our rainy season—the rainy season of the Congo-Zambezi Watershed—lasted six months, during which time we had from 50 to 65 inches, as against 30 to 35 inches in Southern Rhodesia on the Limpopo-Zambezi Watershed.

One night, through native sources (for the natives always manage to receive information ahead of the white man, and nobody knows how they do it), we got news, which was a day or so later confirmed by our own mail runners, that Cayley, who had gone down to Kansanshi, was seriously ill there with black-water fever. The doctor left at once. A little later I had to take the geologist through to Kambove.

On our way we saw a boy coming along the road bearing a message. I took the cleft stick from his hand in which the letter was, and saw that it was addressed to the local manager at Ruwe and marked very urgent. I opened the envelope, read the letter, and then handed it to the geologist.

It announced the death of Cayley at Kansanshi.

I felt really glad that I had made my peace with him before he died, but I cannot say that I was surprised at his death. I saw that, in endeavouring to follow Grey's footsteps, Cayley was taking far too much out of himself, and I knew that his first serious illness would mean that his powers of resistance, lowered by overwork and fatigue, would prevent him from putting up a fight against it. In six years this was our first death from disease, for I do not count the one man we lost from heart failure in Kambove.

CHAPTER VIII

The Happy Valley

No provision had been made for Cayley's successor, consequently things were at sixes and sevens. Watson, the chief accountant, being the employee with longest service in the Company, took charge. I found myself compelled to do draughting work again. A so-called mining engineer was visiting Kambove in the interests of high finance, and he wanted things done. One of the Tanganyika directors, a doctor by profession, had come to report on the sleeping-sickness, and he wanted details of routes and other geographical information. Our Canadian doctor wanted I do not know how many maps, and jokingly remarked that my work seemed to be selling like hot cakes. Studt wanted more work, and I had, at his bidding, for he had a broken right hand, to forge his signature to the big geological map. Finally the Comité Spécial wanted two tracings of the big map I had compiled for George Grey. I had a lot of other work as well. I should not have minded it if I had been adequately paid, or if I had even been thanked for my work. I was virtually a slave. To oblige the mining engineer, who was leaving the next day, I started at seven one morning, had all

my meals standing up in my drawing-hut, and by working all day in a very trying light managed to get finished at half-past eleven at night. I then had a walk in the pouring rain to Msesa, where the mining engineer was staying, and then 2 miles home. This sort of thing went on for nearly three weeks. At last I could stand it no longer. I sent word to Watson that if he wanted to see me he would find me at Kapenga's village. Kapenga's was 7 miles west of Kambove, and there were a lot of partridges there.

Watson came over to see me post-haste before I had time to leave Kambove. He wanted to know what it was all about. I told him that as soon as the rains broke I was going down south. That I was at every one's beck and call and leading a dog's life. He replied that there was still some work to be done, would I do it? "Yes," I answered, "if I have my orders from you. At present I am getting them from five different people." He asked me if I would stay if he gave me an increase of pay. I was not thinking of money, and I foolishly answered, "I have not asked for an increase of pay. What I want is a defined position. Am I to make roads or am I to be draughtsman?" Watson pointed out that he could not give me a defined position. "Very well," I answered, "I go down south."

I went out to Kapenga's village. In the evening, Watson came out too. He was inclined to be friendly. He told me that he was going to open a food-trading station north of the Copper Belt and east of the chain of island-plateaus that separate the tributaries of the

Lualaba and Lufira. Hardy, who was food-trading at Mazanguli, the local centre of our Tin Belt, was to be in charge, and Mazanguli was to be abandoned on account of the advance of sleeping-sickness. Would I help Hardy with the choice of a site, find out all about the distribution of the water tsetse that carried sleeping-sickness, and look for and cut paths? Hardy was popular, and I had heard very good reports of him, so I jumped at the offer. That was the time I should have made a friend of Watson; but I was still feeling too sore. In consequence, I did not encourage him to camp with me, and he went on somewhere else. Four days later I was back in Kambove and got my orders. Watson was very vague about geography, which was not his strong point, but very clear in his instructions about the choice of the trading station. What I had to do was to meet Hardy, and Hardy was to choose the site. I was responsible for ascertaining that there was no *Glossina palpalis* within a 10-mile radius of the station, nor on the direct routes between the station and Kambove, Ruwe, and Chilongo; for the sleeping-sickness, which the activity of the Belgians had carried up the lower Congo, had six months (or more) previously made a big jump and entered our Tin Belt. The Belgians had not made any serious effort to stop the spread of this terrible scourge, however much good work their doctors and others had done in defining the areas infested with *G. palpalis*, the water tsetse, which is the principal carrier of the disease.

I left Kambove as soon as I possibly could after I got my orders from Watson. It was

pouring with rain when I started, and it rained for the first 11 miles of my march. On the road I passed some of our capitaos and carriers and a box with £4000 in gold in it in charge of one of our Zulus armed with a Martini-Henry rifle. I had known the Zulu at Ruwe. He was one of the twenty-two Grey had brought up with him from the south on his celebrated second expedition. The soft-voiced Zulu—all Zulus have soft voices—greeted me, his right arm uplifted above his head with, "We see you, my father." "I see you, man," I replied. I mention here that I like Zulus very much, for to my mind they are the finest race, physically and morally, in the world, the men fearless and honourable, the women workers and virtuous. The Zulu asked after my health, and I about what was going on at Ruwe. How were my friends, my lord Cookson and my lord the giant (Little Billen)? Then the Zulu said, "Is the lord who drops his left shoulder (George Grey's native name) coming back, my father?" "I do not know." "He does not love the Stone-breakers (the Belgians)?" "I do not know if he loves the Stone-breakers." "He is a great chief, my father!" "It has been heard." "If he does not come back I shall go to the south and to my own people. This country is no good, there are no cattle, the women are prostitutes, the Stone-breakers do not pay money." "I hear." Here one of the capitaos, who did not like standing in the cold rain, interrupted. The Zulu was down on him like a sack of coals. "Silence, thou snake's-bastard! We are the Lord Chingala's dogs." And then, turning to me, he

said, "Will my father accept some fowls?" His servant, a smart peccanin, brought a small crate forward. I accepted a couple. I called my servant to bring me a leg of freshly shot roan I had with me. He brought it, and, taking my hunting-knife off my belt, I cut him off a big chunk. I also put a liberal helping of tobacco into his two outstretched hands. Amongst the Bantus it is discourtesy to take anything from a friend or a superior with one hand. I turned to give the order to resume our march. The Zulu raised his hand in salute, "Go thou gently, my father." I answered back, "Go thou gently, my friend." As I lit my pipe and walked along the road smoking, I thought of all the Zulu had said and wondered whether Katanga was worth staying in, and whether some of the teachings of the great pantheist Chaka, who had made the Zulu nation, could not be applied at home to the benefit of our own race; for Chaka's training in teaching the pride of race by calling his people "The people of the skies" (Amazulu), his wars, and his simple mechanical virtue-compelling contrivance, which every Zulu wears, have had the effect of producing a nation of gentlemen.

That night I camped near Nkuba's village, and the following day I turned north, keeping to the left bank of the Dikulwe. I had a very uncomfortable journey, for it rained all the time, and I had to work hard.

I had to cross four rivers, which were running like mill races. After that I had to climb nearly 2000 feet on a very stiff ascent to the top of a spur running out from the chain of island-plateaus. I

had, moreover, to map my route. This spoils half the pleasure of the journey, for it means reading a compass-bearing every five minutes, jotting down from a local native who walks behind you the name of every stream crossed, and of what river it is the tributary. (This is simply asking, "What name? It is a son of what?") Mapping also means having to delay from time to time where good views are obtainable, to take bearings and make sketches of every hill one can pick up. At night it means taking the altitude of a star on the meridian, adding or subtracting the declination, as the case may be, subtracting the whole from ninety, and thus obtaining the latitude of within half a mile or so. Further, the whole of the work has to be plotted after the day's travel. Further, during the day such little and necessary diversions as roughly bridging rivers, interviewing chiefs, getting information, recruiting labour, arranging the pitching and striking of camp, shooting game, and the hundred and one other items of an African pioneer's life that have to be attended to.

From the narrow spur which I had climbed, standing on the edge of a cliff 2000 feet high, I got my first view of the Pande valley. This enclosed valley is about 25 miles long and 6 miles wide, and from the frowning sandstone cliffs facing the spur on which I stood I could see half a hundred tiny waterfalls spread over 20 miles, some of them falling upwards of 500 feet. It was now towards the end of the rainy season, and the waterfalls were at their best. A poetical prospector later on happily described them as the "silver veil of the great Chisinki

escarpment." Up the valley, about 11 miles from where I stood, were two little hills which merged themselves into one above the Pande River, and it seemed to me that they would give us the best site for our food-trading station. In the distance I could see a thunderstorm coming up, from which lightning belched forth, with intervals between the flashes of less than half a minute, and I did not intend being caught on the highest ground for miles in that sort of weather, so hurriedly we stripped the bark off some trees and sat down and made some ropes. The natives lowered my loads and myself over the cliff, and clambered down themselves on to the only spur down which it was feasible to walk —a gradient of one in one going down over 1500 feet. Before the storm broke I reached the camp of my friend Hardy, who had arrived in the valley just before me.

Hardy and I had quite a discussion as to where we should build our food station. Hardy went to see the spot which I had chosen, and the next morning sent me down a leg of roan which he had shot on the escarpment above, and told me the little hill looked so charming from the plateaus above that if I was satisfied with the site he would agree with my choice. To make sure that there would be no change, I went to the biggest village in the valley and brought back with me all the able-bodied men to work.

The Pande River teemed with fish resembling perch (*Cicildæ*), and in the shallows the villagers used to erect little fish weirs, which were washed away whenever the river was in spate. In order

that we might get as much labour as we would possibly require for our buildings, and also to make the thorough acquaintance of the villagers, I thought it would be a good idea to build a permanent colossal fish weir just below the hill on which I had established myself. This turned out to be a very good move, for there was a great run of fish directly afterwards, so that I was able to give every native worker a big fish apiece, and also to smoke some hundreds for our workers' future consumption.

As I had so many natives coming in to apply r work, I decided to give a lecture. The subance of my lecture was that we English had come Katanga to get copper. I knew that there was copper in the Pande valley. What I wanted the people in the Pande valley was to make big rdens, and that we would buy everything they w. I pointed out that they would be able to many wives, the best investment a native make with his money, do no more work (for women would hoe the fields and look after the ps), drink plenty of beer, and live happily r afterwards. Having interested my audience, tarted to tell them about sleeping-sickness in simplest language possible, and I explained difference between the common tsetse and the er tsetse, illustrating on my person the hind of the two tsetses. The one that did no n had black ankle boots; the one that did n had black top boots. I then went right g my audience and asked questions, and picked thirty of the most intelligent natives and took n up to my tent. I had with me three speci-

mens of the *Glossina palpalis*, and I made each boy compare it with the common tsetse. I engaged them at a small monthly wage to search the whole Pande River to its junction with the Dikulwe, and also to search along the left bank of the Dikulwe in case I should decide to make a road to Kambove that way. I promised half a month's wages to any boy who found me a sleeping-sickness tsetse. As they returned without finding any, I began building where I had chosen the site.

The question of choosing a name for the station had to be decided. Headquarters would wri to me and describe our place as Mwendamko which was the name of a village 9 miles awa The natives called the place Kamunyempunda (the one breast), but I knew that a long-soundi name like that would never remain, so I fina called it At The Hill, or Kapiri. While Har was away I had a visit from one of the Direct of the Tanganyika Company and also from Wat the acting manager. With the acting manag selected the biggest piece of flat land on the of about 5 acres, near where I was first camp It was an ideal site about 60 feet above the ri and faced the huge cliff to the south, over wh fell the Mulamba River, making one clean ju of nearly 700 feet. We set out the positions of buildings, and, having recruited more than suffic native labour, I started work in earnest.

I cut down all the trees on the building took out the stumps, and scuffled all the grass From each of the four corners of the square I vistas, like rays from a star. These vistas thro the forest I made about half a mile long and a

30 yards wide, thus giving a good view in all directions. In cutting the vistas I realised that a traction engine road was cheaper and easier to make than a bicycle path, for, in cutting a traction engine road, the alignment is easy work. All that has to be done is to cut the trees flush with the ground and then come along with a big party and yank the fallen timber to the sides. A 15-foot traction engine road should be therefore run through the forest at the rate of 2 miles a day, with a working party of forty strong. With a bicycle path my alignment and pegging the alignment took six natives as against one required for a traction engine road. Scuffling the grass to progress at the rate of a mile and a half a day required eighteen labourers, and about thirteen were required to maintain this rate for taking out the stumps behind.

Shortly after Hardy's return, when he brought with him all the stores down from Mazanguli, I went down to meet the manager at Chilongo, our half-way station on the Ruwe-Kambove road. About 5 miles from Kapiri was a big spur running out from the escarpment, and on the west side of the spur was a native village. It was on the east side of that spur I intended to run my road. I left Kapiri at 2 p.m. with ten carriers and Marikosa, my capitao. At five o'clock I camped at the little village from where a native path ran to Chilongo. That village was a godsend to my five carriers. I had barely got into camp when the rain started. It rained in torrents all that night, and was still raining hard at nine o'clock in the morning. At ten o'clock the heavy rain had

turned to a misty drizzle, and I started to climb the plateau. When I got out of the bush that fringed the edge of the plateau I could see 8 miles of open country ahead of me due south. But I could see no sign of a native path. Here and there ahead of me were small isolated clumps of timber, from which rose streams that drained the plateau. These were the only dry places in the vast expanse of water which met my eyes. I do not want to be accused of lying, but somehow I cannot help feeling that, in those sixteen hours of heavy rain before my journey, close on 2 feet of water must have fallen.

Knee-deep in water at the head of my wretched carriers I wended my pathless way. Half-way, at a little clump of timber, we halted for food. Here was the source of the Mulamba which made the splendid waterfall that jumped over the escarpment facing Kapiri. The natives were so numb with the cold and exposure that they clung long poles and lashed themselves to them, and each boy in turn was thoroughly thawed over a big wood fire.

Just before sunset I found the path again, and was descending a spur. At its foot ran one of the little streams draining the plateau, and over a ri on the far side I could see the smoke of a native village. I determined to reach that village before nightfall, and told my carriers to go on. I was leaning against a tree, sketching and entering notes and bearings into my pocket-book, while the carriers waded through the flood water. I looked up as I heard a shout, and saw one of my scout boxes rushing in the centre of the flood, while

bearer was struggling for his life. Luckily the boy got hold of a snag, close to the far side, on which he was able to stand. My cook was a good swimmer, so I sent him in to bring the boy back. But the carrier was too frightened to move off his perch, and had I not been there would have probably remained on that snag until the flood abated or until he died of exposure. From the snag to the flooded bank on the far side was only a couple of yards; but the boy would not do as I told him, so I had to go in myself. He was more afraid of me than of the river, and was off his perch into the flood water before I could catch him. As soon as I had recrossed I shouted to him to run on to the village, from which smoke was rising, about three-quarters of a mile away. As I shouted, a lion roared—and before I could say Jack Robinson that boy was up a tree.

After our hard day's exposure I felt it would be wrong to let that native spend the night in a tree. The flood water was about 40 yards wide, and none of us knew exactly where the banks were, between which the stream was running like a mill race. I ordered my people to throw the boy over a spear, but their caution made them lose two spears before they succeeded in getting one across. I had much trouble to make the boy come out of his tree and fetch the spear that was standing upright in the flood on his side of the stream; and I was really glad to see him get the spear and start running, before the darkness closed, to the little village on ahead.

If any future traveller wonders at the high bridge I put over the Kamarengi on the road I

made from Kapiri to Chilongo, let him remember that that stream, which is only 26 feet wide in the dry season, is the only watercourse to carry off flood water from over 10,000 acres of country.

This insignificant journey teemed with incidents, and thus enabled me to forget its discomforts. When I woke up in the morning, just before dawn, I saw a green mamba, the most poisonous snake in Africa, going round and round and round the inside of my mosquito curtains. I had my arms under the blankets, and the snake passed my head about six times before I could think of what to do.

Calling in a voice as gentle as a woman in love, far different to the way I usually spoke, I repeated my personal servant's name until he came. Almost in a whisper I told him to tell Charikosa to get two sticks, open the far end of my mosquito curtain, throw the snake out, and kill it. I knew I could rely on my capitao Charikosa, the brave Awemba native who had been with me seven months. It was with a feeling of real relief that I watched Charikosa carry out the orders I had given.

When I arrived at Chilongo on the same day as the snake episode, for I had managed to circumvent the Kamarengi in the morning, I found the whole country flooded, so I camped back about a mile in the bush. I plotted my route, shot some teal, and a few hours later discussed my future road work with Watson, who had to the minute, in spite of the difficulties of travel, kept the appointment which he had made three weeks before,

when he visited me at Kapiri. I was able to say authoritatively that there was no *Glossina palpalis* within a 10-mile radius of Kapiri, nor was there any on the routes between Kapiri, Ruwe, Chilongo, and Kambove, and that our buildings were approaching completion—a good six weeks' work.

CHAPTER IX

THE INTERREGNUM

THERE was much work to be done at Kapiri before I started road-making. I lent Hardy a hand with the buildings, which were now well on their way to completion. We had a visit from the poetical prospector, whose boys gave me a royal salute when I presented them with a fish apiece caught in my big weir. My first step in road-making was to make a good path down to the Pande, where there was a little island in the middle of it about 150 yards above my weir. This furnished the best place for a bridge to our garden in the little patch of alluvial ground in the bend of the river. I then followed the Pande up until I could find a good crossing for my road. About 20 yards north of the direct line that I was going to run it had narrowed to 42 feet. There I decided to make my crossing. I then had to choose a good crossing for a swamp at the foot of my ascent of the plateaus. I looked at one or two, and finally chose one where the swamp was narrow but the bank down to it very steep. After that I selected my route up to the plateaus 2000 feet above. The moment rains broke, I started road-work. I ran down to the Pande, about a mile, the first day and cleared the ground round my crossing.

I spent two days making a frame bridge, or, as the Royal Engineers call it, a double-lock bridge. My working party was about fifty strong; some made ropes out of bark, while others felled straight magnolias, as I call the heavy, light-coloured timber which the white ants do not eat. When the bark ropes were made, and the timbers dragged to my site, my working party cut transoms, and brought bamboos to deck the bridge. Then trestles were made, while my working party prepared bark string, bark rope, and split bamboos to form the chesses with which I intended to cover the bamboo road bearers. At the same time a few boys under my capitao were preparing footings for the bridge. There was some bar iron at Kapiri for the prospectors to make drills with; from it I cut off several bits for bolts and wedges, *with native axes*.

On the evening of the second day's work, the bridge was completed; and I was much pleased with it, for my working party consisted of raw natives, many of whom six weeks before had not seen a white man. Moreover, counting my pay, rations, and native wages, the bridge had cost the Company less than £3. To test it properly, I made fifty boys dance and jump about on it to see if they could break it, while I stood underneath. A few days later I had the satisfaction of hearing that our doctor had bicycled across it, and I certainly felt capable of tackling any sort of work after that, such as bridging for traction engines or even building railways.

While running my alignment through the valley one of my alignment boys shouted "hornets"—and I ran. This shout of "hornets" was almost

an everyday occurrence, and, so far, I had escaped without getting stung. This time a big black chap about 3 inches long succeeded in settling on the back of my neck and stinging me. I got stung on the chest on the railway survey. Although there are several kinds of hornets, I only divide them into two classes—the big chaps and the little chaps. The big chaps have their nests in holes underneath fallen trees. The small hornets make nests of mud about the size of a man's fist, which hang from small shrubs in the bush.

I was just getting out of the Pande valley when I received a runner from Hardy with an urgent letter asking me to send him some antiseptics and some dressings, as his supply had not arrived from Ruwe. When I went into Kapiri to spend Sunday, Hardy told me what he had wanted the antiseptics for. He had several boxes of detonators for the use of the miners and prospectors for firing dynamite charges in rocks. Amongst Hardy's workers were several boys who owned trade guns. Caps for these were very expensive and very hard to procure. The boys were ignorant of the strength of the detonators, but thought that they would do for caps, so they stole several boxes of them. One native had tried to fire his gun by means of a detonator, with the result that he had the thumb and forefinger of his right hand blown off. The others, who were accomplices in stealing detonators, drove the unfortunate devil with the injured hand into the forest and told him to die there in order that the robbery might be concealed. That is the native all over. Hardy missed the boy,

whom he liked, and could get no one to tell him where he was. Finally he himself went out and searched for the boy, and discovered him in the forest quite prepared to accept the death which his brothers had sentenced him to. Hardy's patient was progressing favourably when I saw him, and later on got all right, Hardy having made quite a good job of amputating the broken part of the hand.

I was camped for about a fortnight on the plateaus south of Kapiri. I made up my mind to trench the whole road and have a raised roadway 4 feet wide and 1 foot above the level open prairie. The name of the plateau that I was on was the Chiloba plateau, and from it on the same level were the Chankwari escarpment and spur which form the southern boundary of the Pande valley. The northern boundary of the Pande valley was the Chisinki spur, connected by a flat ridge about a mile wide with the great Mutanga Mianbi plateau, which was over 40 miles long and 9 miles wide, with several little plateaus of a few square miles off it. All this country, which commenced just north of our Copper Belt, was a huge mass of red horizontal sandstone. It was 6400 feet above sea-level, entirely free of tsetse fly, and the air most exhilarating. It was very easy to travel about this country on account of the shortness of the grass, which one was able to burn earlier than any of the grass down below. The reason for this was that if you dug a few feet you were on to rock and the dry sand on the top drained very quickly.

Working on the plateaus was very pleasant,

and I did not have to put in thirteen hours a day as I usually had to do when I was working in the forest. I was obliged to send my axes away to be sharpened at Ruwe, for the manager did not consider my work important enough to allow me a grindstone. I sent two messengers out with trade goods to visit Mbambi, the chief, who went in for iron-smelting on a commercial scale some 60 miles south of me. Mbambi turned me out twenty-six axe-heads at eighteenpence each, or 3 yards of calico, for we had no money in Katanga then, and reckoned at sixpence for each yard of calico, which cost twopence wholesale in London.

Mbambi lived a little north of the range of Iron Hills—mountains of pure hematite—between the Congo River and the Great Watershed. This iron range was close to the road between Ruwe and Kansanshi, which ran inside the Belgian border. I began to realise better the wonders of Katanga, which is probably the richest country for base minerals in the world. West of the chain of island-plateaus, and adjoining it, we had granite country in which was a Tin Belt roughly 30 miles wide and over 100 long. South and west of where I was working lay our Copper Belt, with 200 copper mines, which the natives had worked, and many others showing of copper too poor for them to touch. The Copper Belt was roughly 25 miles wide and 180 miles long. South and west of the Copper Belt were the Iron Hills, a broken range running over 60 miles, in which were bodies of the purest iron ore, many of them 2 miles through and 7 miles long, showing up for 1000 feet above the surrounding country.

Elsewhere were salt marches covering thousands of acres.

Altogether, that part of Katanga is a wonderful country. From the north end of the chain of island-plateaus, 6400 feet above the sea, the country breaks down in a series of escarpments to only 1200 feet above sea-level. Thus in 8 miles one passes from South Africa to West Africa. In parts of the country, a few miles apart, could be found the rubber vine of the tropics and our old friend, the English bracken, growing almost side by side. In the open forest composed entirely of South African trees were here and there dark, impenetrable patches of *msitu*. These patches of tall trees with wood so hard that they turned the edge of any axe, were bound together with a tangled mass of creepers and a dense thorny undergrowth. They were part of the flora of East and West Africa, and had survived from a former age. On account of the longer rainy season, with its equable temperature followed by the bracing dry weather, during which no frosts occurred except in the highest country, we were able to grow in our gardens round each local centre such divergent things as bananas and strawberries, passion-fruit and English pear trees, French beans and castor-oil bushes.

While making my road into Chilongo I ran by an exceptionally good patch of rubber, but I dared not tap any for fear of falling foul of the Belgians, with whom the Tanganyika Company were then in the closest and most friendly alliance. I remembered, too, the harrowing tale of Rabinek's murder by our Belgian partners. In all good faith,

and complying with all the laws of the country, Rabinek the trader had crossed the Luapula River, which separates North-Eastern Rhodesia from the Southern Congo. From the native villagers he had bought some thousands of pounds of rubber, which he had every right to do under Article 5 of the Berlin Conference (1885), which constituted the conventional basin of the Congo to be a free trade country. He was arrested by the Belgians and tried by a mock military tribunal; his property was confiscated and he himself sentenced to a year's imprisonment. Under a black escort he was sent down to the Lower Congo, on whose banks he lies buried in a nameless grave. Later Milstead, one of the Tanganyika men, had decided to give up working for wages, and settled in North-Western Rhodesia, just over the Congo border. While he was getting his place into shape, he, too, bought rubber from the Congo natives. He had no backing from the British South African Company, in whose territory he was settled; there was no Consul in Katanga then to protect English individual interests. In spite of my representations to Sir Edward Grey, and in spite of the fact that our manager, George Grey, was one of Sir Edward's younger brothers, no Consul was appointed till too late. The Belgians prevented the Congo natives from trading with Milstead, while messengers, sent across the border into English territory, also frightened away every native who was working for him. With these and other cases before me, I saw that it was as well to leave rubber entirely alone.

After running my road into Chilongo I returned

to Kapiri, bridging the road on my way back. At Kapiri I paid off my working party, and after a day or two of rest started down to look for a road to Ruwe, following the native path. I camped at the foot of the plateaus the first night, and on resuming my journey in the morning I told my people to follow the native path until they came to the head of the Pande River, and there to make a fire and cook lunch for me. But when I struck the path again some 9 miles farther on, near the head of the Pande River, I could see neither my carriers nor my servants. I was very hungry, for I had started out on a cup of tea only, and consequently very cross. I had waited nearly two hours, when in the distance I saw my carriers arriving. They were laden with meat. My anger was appeased by the story Charikosa told me. On the top of the plateau they had run into two lions that had just killed an eland and were starting to breakfast off it. The boys put down their loads—there were only ten of them—took their spears, and advanced in a compact body as near the lions as they dared. They threw sticks and stones at the lions, who said nasty things and refused to be driven off the kill. One bright boy conceived the idea of lighting a big fire, and from a distance of about 20 yards away the boys amused themselves for nearly an hour having pot shies at the lions with lighted fire sticks until the lions got sick of the game and let my people capture the meat.

As I followed the path across that plateau I could see 12 miles west ahead of me, 8 miles to my left and south, and an indefinite distance to my right and north. I counted in all fifteen

different herds of buck grazing, hartebeeste, sable, roan, eland, and in the distance some other species I could not distinguish. In the centre of the plateau was a large pan from which rose hundreds of wild fowl, and I could not help feeling that it was by this pan in this open, healthy country, free from tsetse fly, that we should have established our food-trading station, which before long would become the centre of a great grazing district and the only cattle country in real proximity to our Copper Belt, except that part of the Congo-Zambezi Watershed west of the Lualaba, that one day would be traversed by our railway to the coast.

I descended the plateau and followed the valley of the Nguli, a tributary of the Lualaba, encountering only about 2 miles of "fly" country on my route, and I saw that we would have no trouble in getting cattle to the plateau country, for the tsetse fly does not bite on dark nights and "fly" belts 20 miles wide in the south are frequently crossed by transport riders travelling at night. The native path which I was following was very straight, and for over 30 miles I was able to see Chimweulu Hill, a landmark about 4 miles east of Ruwe. I saw, therefore, that there was no need for me to make the road myself, and that Charikosa, who was well trained in running alignments, could carry out the work. After reaching Ruwe I returned to my crossing of the Lualaba, which I called the Murumbu crossing, and recruited a number of labourers. I then left to go into Kambove in answer to a letter I had from Watson about some other work.

I had an uneventful journey into Kambove,

except on one morning, when, before breakfast, I had gone ahead of my carriers with my cook and one other boy carrying a light scoff-box and my folding chair and table. While my cook was preparing my breakfast I took a stroll into the forest without my arms. I heard something run away and walked to where I heard the noise. Weltering in a pool of blood behind a big ant-heap was a freshly killed wart hog with half its entrails eaten and lion spoor all round. I wonder if that lion was Willie? Willie gave us a lot of trouble. He sat down beside the road between Ruwe and Chilongo. He succeeded in killing one of the mail messengers, so that our mail runners would not go along that road unless they went eight-eight. He ate practically the whole of one of the garden boys of Chilongo, whose foot was subsequently shown to me as a proof of Willie's depravity. Willie caused me a lot of inconvenience. I sent an important message to my capitao, who was making the Ruwe-Kapiri Road, and Willie treed my two messengers, who returned to Chilongo and spent a week waiting on a strong party of carriers coming along before daring to pass Willie's haunts.

The only benefit of Willie's man-hunting period was that he enabled several of the white and native workers of Kolwezi to have holidays to go out and kill him, but none of these little shooting parties had their efforts rewarded with success. So Cookson, the then local manager at Ruwe, had to go after him himself. Cookson has killed more lions than any man I personally know in Africa. He rightly looks on lions as vermin, and whenever he hears a lion roar he turns to his personal servant

and says, "Where is my strychnine?" It did not take Cookson long to get Willie. He arrived on Willie's ground one afternoon, shot four hartebeeste, cut them up in pieces, and into the pieces he rubbed strychnine and spread the poisoned quarters all about the place. The next morning Willie was dead, and Cookson gathered up the other poisoned fragments and burnt them.

At Kambove I got a lot of news. A distinguished mining engineer, Freshfield, was touring the Concession in the interests of high finance. Freshfield's report was never published, and as I obtained my information of its contents from a source which I do not intend giving away, I shall not discuss it, beyond saying that I think Freshfield, from want of local knowledge, overestimated the cost of the Benguela railway to Katanga. I also learnt that our period of transition was over, and that we were to have a Belgian manager to carry on the work which the Tanganyika Company's pioneers, under George Grey's able leadership, had so brilliantly started.

I had determined previously to deal with the bad swamp on the Ruwe-Kambove road, and I asked the acting manager to allow me to tackle it. He demurred, saying that it would cost £100. I told him that it would not cost £30. He asked me if I would take it on contract at that price. I pointed out that I was a servant of the Company, and that I intended to continue being a servant of the Company until I could see a really good opportunity of starting on my own. Finally, yielding to my persuasion, the acting manager said I might put in a week of my own time on it, and allowed

me to spend on labour one truss of calico (£7, 10s.). Before going to the swamp I stayed at Nkuba's village in order to fix up my suspension bridge. If I had had my way in the first instance I would never have made a suspension bridge, for about three-quarters of a mile lower down the river was a small clump of giant magnolias, one of them 10 feet through and 300 feet high, the smallest of the clump being 3½ feet through and having about 80 feet of clean, clear bole. My idea of a bridge over the Dikulwe was to cut down a couple of these trees, roll them over into the river, and drag them up to the crossing, for, although they would not float, to get things through water means only a quarter of the effort that is required on land. With a big working party and a winch I could easily have hoisted up the timbers at the crossing to the banks, which were about 16 feet above the mean flow of the river.

I had tightened the bridge and redecked it, and was just starting off for the swamp when the travelling Consul, who was subsequently appointed British Vice-Consul in Katanga, passed my camp. Beyond trying to enforce courtesy and respect from white men and natives alike, I lived a very simple life in Africa, and never kept up that humbugging style that so many men of a different class to myself go in for. In that camp I had only six carriers and one servant, so it did not surprise me that such an important man as a British Consular Officer did not call in and pay me a visit. However, on my meeting him later, he asked me to come and dine with him, and after camping on the far side of the swamp, which I was going to put in

order, I walked over to his camp, which was about 4 miles beyond mine.

The Consul was Mr. G. B. Beck, who had served in the Yeomanry during the South African War, and whose book, *The Aftermath of War*, described the deplorable condition of the Transvaal and Orange River Colonies when peace was declared and the splendid work done by the Repatriation Department in which he served. Beck had been in the Colonial Service in West Africa and also had travelled extensively in the Congo and in Uganda as well, so that his knowledge of Africa was exceptional. I also had a lot to talk about, for my experiences had been even more varied than Beck's. We passed a very pleasant evening furnishing each other with our mutual information, and it was close on three o'clock in the morning when I set out to return to my own camp.

Before going to dine with Beck an incident occurred which rather upset one of my preconceived ideas. I was rounded up by wild dogs. We had just got into camp. We were a big party, for Nkuba had brought nearly all his people along, and eight other small chiefs had arrived, each with a few followers to help me fix up the swamp, for which each native labourer was to be paid half a yard of calico for an eleven-hour working day, each labourer providing his own food and his own big native hoe. A few well-placed shots and our determined stand enabled us to drive off the dogs without any difficulty. However, I realised that many of the stories—stories I used to ridicule—of the

ferocity of the hunting dog of Africa were true.

George Grey once said that he was afraid of nothing but wild dogs. The reason of his fear was that the dogs had given him a 5-mile run when he was bicycling from Kambove to Kansanshi. The most ghastly story of wild dogs was told me by a prospector. He was standing on the top of a hill, sweeping the country round with his binoculars. About 4 miles away he saw two boys crossing an open vley. A pack of dogs came along. The boys had no spears. There was no tree for them to climb. The boys stood back to back. The dogs came up to them and sniffed them. Suddenly one dog sprang at a boy. In less than two minutes not a vestige of a man remained. I could tell stories galore of wild dogs; but somehow to me the wild dog was one of the most harmless things I had ever seen. So little did I believe the stories that one time when I was in Southern Rhodesia I was going down alone to bathe, when a pack of about forty wild dogs passed me. I whistled, and one of the dogs came out of the pack within a few feet of me. I put my arm forward to try and stroke him. He made a savage snap at me, which I luckily avoided, and ran back and joined his fellows, who had passed on unheeding. Often on trek has a dog come out of the bush, barked at me, and run away. But after my experience at the swamp I took care that I did not go any distance away from my camp without my rifle or my shot-gun.

My work on the Kelangile swamp took me

exactly one week. First I cut a passage 40 yards wide through the reeds, which were about 10 feet high, during which time those who were not cutting reeds were making pegs, alignment poles, or bark string. With string and ranging-poles I set out, by eye—for I have no level other than an old bottle—earth-work right across the swamp, so that the roadway was 6 feet wide on top and 12 feet wide at its base. With the exception of about twenty people, whom I picked to help me, I put all these local workers to throw up earth-work from the firm black ground of the swamp. With my twenty workers I made three bridges, one in the centre where the Kelangile River ran through, and two at each end to carry off flood water. The natives worked willingly, and I had the satisfaction, when I calculated up numbers and the work done, of knowing that every boy had averaged 4½ yards a day. To prevent absence I had four surprise roll-calls in the day, and the roll-calls, with an occasional otter hunt, helped to relieve the monotony of the work.

During that week's work the road was full of traffic. Freshfield and his party passed. Charles Jocks and Sharp, on their way to Kolwezi to carry out an experimental method of roasting copper ore, came by. Charlie Jocks was one of the best type of Dutchmen I have ever met. He once had been to London and there had been entertained at luncheon by the Managing Director of the Tanganyika Concessions. Jocks had been one of the members of Grey's Scouts, the corps which George Grey raised and commanded during the Matabele rebellion. He had the greatest respect

for George Grey, whom he always spoke of as the Captain, and was not at all pleased to hear a mere company promoter address the man he worshipped as George. Jocks and Sharp had been together a long time prospecting, and had had many interesting experiences together. One night on our western frontier they had been attacked by slave raiders, losing one native killed. Jocks and Sharp hurriedly went to the nearest Belgian post, borrowed several soldiers off them, and followed up the slave raiders, on whom they inflicted a severe defeat.

The work that they were going to do was decidedly interesting, for practically on the success of their experiment depended the whole future of the Copper Belt. They had been instructed to break copper ore into small lumps, and cook the lumps on slow fires in the open. It was thought that little nodules of pure copper would form in the lump. They would then pound up the lumps and wash the little nodules of copper out.

I had just finished fixing up the swamp, which cost, including my pay and rations and native wages, exactly £11, 4s.—my earth-work running less than 1¾d. a cubic yard—when the Vice-Governor passed through my camp. Major Wangermee, the Vice-Governor, who was also representative of the Comité Spécial of Katanga, was a particularly good type of Belgian. He had a varied career, and had at one time, I believe, served in the ranks as a private in the Mexican army. His rise in the Congo service had been rapid, and he had been credited with pacifying

the Kasai, where the "Revoltés" (Batitela) and Walenzi hunted slaves, to sell to the intermediaries of the agents who supplied labour for the cocoa islands off the coast of Portuguese Angola.[1] As a matter of fact, when Wangermee's columns went through Kasai the slavers had merely dispersed into small groups, who got together again and started slave-raiding the moment the Belgians left. I liked Wangermee, whom I watched cross the swamp on his bicycle, but I did not like the rabble soldiery that accompanied him.

I had sounded "Lupenga" with my whistle just before Wangermee arrived. "Lupenga" in Central Africa corresponds to the "Chiile" of the south and is the cease-work call, the midday dinner-hour being known as the Lupenga hour. When Wangermee's soldiers marched across my earth-work none of my people were about. His soldiers removed 250 yards of my bark string from the posts on either edge of the bank. I did not notice the theft until after Wangermee had left. The moment I noticed it I sent off a runner with my complaint. Wangermee returned no answer to my message, but I subsequently heard that he had his soldiers searched at Nkuba's village and punished nine of them for theft that evening. It had not been Belgians who did the cutting off of hands in the Congo; it had been the native soldiery when let loose.

[1] The people in the slave trade are: (1) The Revoltés (or Batitela) = matured soldiers and their following; (2) The Walenzi, a nomadic cannibal race; both the above live in the Kasai; (3) The Mabunda, a nomadic trading race who live in N.W. Rhodesia and Angola.

I had been having a bad time. Every night towards sunset I would have a sharp attack of fever, which left me before morning. We English call this form of malaria intermittent fever. The Belgians have a better name. They call it interminable fever. I was so weakened that I decided to go to Ruwe and put myself in the doctor's hands. I gave up sleeping in a bed altogether, and to get extra warmth I passed each night sleeping on the ground between two fires. I was very bad in our rest-house at Chilongo, and was forced to have a fire on either side of me, for I only had three blankets and could not get warm. One of my fires set fire to a pole in the mud-wall, which I luckily extinguished in time. I had a lot of trouble with the native capitao of Chilongo over this, for he wrote a lying letter to Watson about it. The damage was nothing, and I repaired it in an hour's work in the morning, but Job, the capitao, thought he could get a chance at me, for I had continually reported him for being a thoroughly disloyal servant, for stealing the Company's money to spend on beer, buying wives, and going in for other vices.

When I reached the Mwamvwe crossing I had recovered sufficiently to enable me to join the doctor for a morning's shoot. We got one or two big buck, and I foolishly loaded up the spare boys I had with me with meat to send them to Ruwe. I had only to walk 14 miles to Ruwe that afternoon. About 2 miles from Ruwe, at about eight o'clock at night, I broke down hopelessly, and had to send one of the two

gun-bearers to the storekeeper to send me out assistance in the shape of a bottle of champagne.

In Ruwe I had a hopeless breakdown. I saw I could not go on any longer. So after a fortnight I wrote to Watson for liberal treatment and followed up my letter by hammocking (for the first time) through to Kambove on my way home to England.

CHAPTER X

From the Congo to Cape Town

Before I left the Congo the Belgian manager, whom we had been expecting for nearly a year, arrived. The natives christened him "Chitumbo" (big belly). He was a short, fat Belgian, and his name was Bertholet.

Bertholet was carried in a hammock from the railhead to Kansanshi mine. There he learnt that it was not the English or South African practice to use a hammock when travelling. In order to conform to our usages he decided to do the hundred miles to Kambove on foot. At the end of his second day's march he was so footsore and weary that he sat down for seven days to recover. He then walked for another two days, and rewarded his efforts with a four days' rest. He managed then to march three days without breaking down, making Kambove on the eighteenth day of his trek. Bertholet had been a schoolmaster in Brussels, and subsequently had managed a tramway in some Russian town. His Belgian employers thought so highly of him that they gave him £1500 a year and an agreement that he should remain in their service for seven years.

From the first Bertholet made things im-

possible for the Englishman. He had come provided without any money whatever. Our managers, and even small people like myself, had been accustomed to act on their own responsibility. Bertholet had no initiative. Like a good many other people, before putting the work in hand, or committing himself to a decision, he would write home for instructions. Although our mail service was very efficient, the very least time in which Bertholet possibly could get an answer was ten weeks.

In taking over the Tanganyika Company's stores he haggled over trifles, fearing that he might be defrauded. He made quite a fight over paying £400 for Grey's splendid brick house. The brick house had been built with the cheapest possible labour at a cost of £600. Such a house in England would have cost over £1200 to build. It was unwise to raise native wages from 3s. a month (six yards of calico) to 5s. 10d. (over eleven yards), for this increased the cost of the transport and development work by nearly £10,000 a year. This increase of cost, due to humanitarian motives, had the effect, in a few months, of enormously reducing our supply of voluntary labour, for the natives got too much calico and would not do any more work.

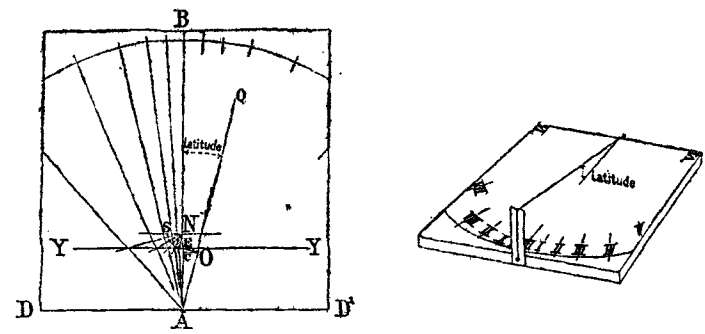
I confess I did not think Bertholet, on my first meeting with him, well fitted for his difficult post. He had engaged a carpenter who had wandered up from the south in search of work, and had employed the man to put up some buildings.

Bertholet was talking to the carpenter on my arrival. Bertholet pointed out to me what a good

man this chap was, because he had come 2 miles from his work to report to the labour office the absence of one native boy. I can see, if I shut my eyes, the sixty other boys he had with him, sitting down and enjoying themselves in the absence of their white master.

I had a passage of arms with that white carpenter a little later. To ingratiate himself with Bertholet he had promised to make him a sundial, and as he did not know at what angle to put the stylus, he hunted round Kambove to get information. He was referred to me, as I had the reputation of being an authority on such subjects. The carpenter came round to the mud-hut that had served for drawing office. In it I was engaged in doing some work for the local manager of Ruwe before going home. He told me he knew all about sundials, and that you put on the hour angles by the aid of a watch, but that he was not quite certain at what angle the stylus should be placed. I told him that if he wanted to know about sundials he must pay me. He said he was not going to pay for what he already knew, so I told him to get out of my drawing office and manage as best he could.

To make a sundial is a very simple matter. I generally take a piece of board about a foot square and smooth it and paint it white. I then draw a line at right angles to one side, bisecting the dial. This mark is twelve noon. From one end of this line I strike a semicircle, with the length of my first line as radius. I will call this line AB and the semicircle I have struck DBD^1, the diameter, the far edge of the dial being there DD^1.



GRAPHIC CONSTRUCTION OF SUNDIAL.

(1) From A, on line BA, I erect the latitude of place BAQ, the line AO being about one-quarter of the length of the line AB.

(2) From O I drop a perpendicular OC on to the line AB.

(3) I make an angle COE equal to the angle BAQ (the latitude of place).

(4) E being the point where the line OE cuts AB.

(5) With centre E and radius EO I cut the line AB at N.

(6) From N I erect a perpendicular NS at right angles to my line AB.

(7) With centre N I describe the quadrant ES.

(8) I divide the quadrant ES into six equal parts.

(9) Through E I draw a line parallel to my diameter DD^1 to cut the semicircle in Y.

(10) From N I draw lines through the five marks on my quadrants ES to cut the line EY in five places.

(11) I join A to each of these five places and produce these lines to cut the semicircle in.

(12) I then number my point B XII and my five points on the semicircle I, II, III, IV, V, or XI, X, IX, VIII, VII, according as I have done my graphic calculations on the left or right of the dial.

(13) I number D and D^1 each with a VI. I have now made the hour angles.

To make the stylus I get a piece of hoop iron and cut it a little longer than the AB multiplied by the tangent of the latitude of place. I will call this distance BX.

I screw the bit of hoop iron firmly to the board below B. I file a notch in the top of the top of the hoop iron, so that from the bottom of the notch to the edge of the board is exactly the distance BX. I put a nail in the edge of the board below A and tie a piece of thin copper wire round it. I pass the wire over the notch, and after having stretched it tight I make the wire fast to the screw below B.

My sundial is made.

Those few days I spent in Kambove were of real interest. I did some draughting work that Cookson wanted. I also put myself in the hands of our English doctor—our other doctor who was at Ruwe was a Canadian—who gave me injections of quinine, which enabled me in eight days to throw off my nightly attack of intermittent fever. The doctor had a motor-bicycle and went through to visit Ruwe. It will give an idea of how good our communications were when I say that on his return journey he left Ruwe at half-past nine, lunched at Chilongo, and reached Kambove at half-past four, a distance of 96 miles.

Hayden, who was now manager of Kansanshi mine, bicycled in, or rather bicycled the first 100 miles and walked the last 18. He told me he had never seen the tsetse so bad as they were on that road, and as he was not wearing a coat, nor had gloves and a veil with him, he was forced to leave his bicycle beside the path and walk in. He congratulated me on the way I had cut the path. I had hoped, for that had been George Grey's promise, to turn my path into a traction engine road. However, Hayden had arranged for two other men to do the work; for he had heard of my breakdown.

In all we had seventeen white men in Kambove, most of whom had come in to see Bertholet. One man whom Watson had brought up was a unique character, known as Moses, a big breezy Dutch-speaking Portuguese Jew, almost as original as his nationality. He rode in on a donkey. His job was to open up food-trading west of Ruwe. His real name was Texeira de Mattos. I rather liked him, although I did not like the food buying and labour recruiting of the district of the western Lualaba being given to a new arrival instead of to one of our men, who had borne the brunt of the day.

I learnt also the latest news of the Star of the Congo mine. The Star of the Congo is now the Belgian town of Elizabethville, and for a year was the northern terminus of the South African railway system, which has wandered off its intended direction towards Cairo and has made a turn in the direction of Benguela, so some of the earlier history of the Star will be of real interest. When the Tanganyika people first

arrived in Katanga they were all "blanket" prospectors—a name given to the man who tells natives that if they take him to copper, gold, or other minerals he will give them so many blankets. West of the Lufira a lot of copper mines were found by this method, but the chiefs of the Walamba who inhabit that portion of the Copper Belt told their people not to give away the position of the big mine. With other men Ericksen was prospecting the east Lufira district. One day he had been out shooting and had been missing right and left on account of the sun shining on his foresight. So before going out shooting again he took a bit of candle and blackened his foresight. One native watched him with interest, and when he saw Ericksen shoot six buck running, without missing a shot, he thought there must be some magic in that bit of candle. So he determined to have the candle, with which he would blacken the end of his old blunderbuss and thus ensure a perpetual supply of meat. He asked Ericksen for the candle. Ericksen told him that if he would take him to Karukaruko, which was the name of this big mine, he would give him the candle. The boy led Ericksen to the big mine.

That is the story of the discovery of the Star of the Congo mine. How it came to be called the Star of the Congo is another story. Grey had insisted from the start of the discoveries that the native names of mines should be employed, or, in case of the mine not having a name, that it should be called by the native name of a river or hill near by. The Star is the only mine that has an English name. Ericksen, after he had found

the Star, did not want to call it Karukaruko, for two Karukarukos (which means verdigris) had been discovered previously. As it was such a big mine Ericksen asked if he might call it the Star of the Congo, and Grey allowed the name to stand.

The discovery of the great Katanga Copper Belt is one of the quaint romances of history. As long ago as 1785 the Portuguese made an effort to find it; the celebrated Brazilian explorer, Doctor Lacerda, who perished in the attempt, failed to discover it. Livingstone has often mentioned in his writings the quantity of copper carried by natives whom he met on his travels in Central Africa; but Livingstone was never within 150 miles of the eastern end of the Copper Belt. Commander Cameron, who crossed Africa from Zanzibar to Benguela in 1876, travelled by a route some way north of the Copper Belt. Commander Cameron is responsible for the name Katanga. In his book *Across Africa* he wrote that copper is found at Katanga's (the name of a small chief whose village has since disappeared), and for a considerable distance to westwards. Before Cameron's time, and afterwards, copper had been finding its way as an article of native trade 700 or 800 miles north of the Congo basin and 600 miles south to near the mouth of the Zambezi. I remember my Yao servant, Musa, who was then a man of thirty-five, telling me that twenty-five years previously he had accompanied his father on an expedition to the Copper Belt. His father, with several other Yaos, accompanied by their slaves, had taken the 600-mile journey,

spent six months smelting, and had returned to their homes in the Achewa country laden with copper.

On the maps, as recently as the end of the last century, the Copper Belt and all the country surrounding it is shown white and marked Msidi's Empire. About fifty years ago a young Yeki from the Umyamwezi (Garengenze) country, now part of German East Africa, visited Katanga to purchase copper which he might resell in his own country. Katanga was then a part of the once mighty Arab empire of Kasonga. Msidi allied himself with one of the chiefs of the Wasenga nation, the principal race in and around the copper mines. Then he returned to his own country (Garengenze), collected by favour and compulsion as many Yekis of his own tribe as he could, obtained four muzzle-loading flint lock guns (weapons then unheard of in Central Africa), and went back to his Wasenga ally, who was at war with a neighbouring tribe and in great difficulties. With the four guns and the superior *élan* of his Yekis, Msidi enabled the old chief, his ally, to secure a speedy victory. Msidi became the chief's right-hand man. After the old chief's death he increased his dominions, and built up a large empire, making himself the great potentate of Central Africa.

Msidi turned his career of conquest to commercial account. He opened up communications with the Portuguese in Benguela and sold them slaves and copper. From personal knowledge I illustrate what this trade was. One of the surveyors in Bulawayo told me that as a young man his father was a super-cargo on a sailing vessel

trading with Portuguese Angola. Their ship was lying in the mouth of the Kwanza River, which enters the Atlantic north of Benguela. They had got a full cargo on board when over 6000 carriers (slaves) arrived loaded with copper. They purchased the copper, and, not having room on board, buried roughly 100 tons near where their vessel was lying. His father left the shipping business and entered the East India Company's service. He left to his son the position where this copper is buried.

Msidi was a man of great ability and possessed wonderful tact. He was a strange mixture of good and evil. He could be generous at times, and yet at the same moment was capable of the most inhuman acts of cruelty to his own subjects and those with whom he was at war. Nkuba, the copper smelter, in whose village I was camped when I bridged the Dikulwe, had been one of Msidi's lieutenants. Many is the time that Nkuba had told me of the past glories of Msidi's rule and of the prosperity they all enjoyed from the commerce Msidi created.

The wealth of nations depends on their surplus products with which they are able to buy luxuries which they want and which they cannot produce themselves. For the interchange of commodities banking and transport systems are necessary. Slavery as the native conducted it, not the ruthless exploitation of labour as the white man would have it, was in the past Africa's banking and transport system, for the slave was a beast of burden and a draft that could be cashed at sight. When Europeans first went to Africa they bought

slaves as they buy horses now—to get the maximum amount of work out of them. By offering high prices for men they encouraged the Arab slave raiders to devastate whole districts in order to get cash for men whom the Europeans intended to work without payment, just as they work animals to-day. It was Europeans who made slavery the curse it was, the curse it is to-day in the cocoa islands of St. Thome and Principe, the Portuguese islands off the coast of Angola.

Decent-minded people at home made a stand against the commercial exploitation of human beings, an exploitation that was causing the Dark Continent to be devastated by the slave raider. The European Governments put down slavery with a firm hand. In doing so they destroyed the whole interior commerce of Africa. In the last thirty or forty years, despite all missionary efforts, Africa has fallen back because one race can no longer trade with another. The world is too far advanced to permit of the revival of slavery as a great economic system. Christianity will not carry products from one region to another. Money spent in missions may or may not help in the future salvation of Africa. What Africa wants is currency and communications. The banker and the railway builder can do more for the commercial prospects of Africa than all the Bishops and the Foreign Ministers of great Powers put together.

I take little interest in native arts and crafts, but I felt that I must take home some specimens of copper, so I purchased six large copper hoes from natives who had been employed by me on my road

work. Every person to whom I showed my hoes asked for a present of one. I did not want to part with them; however, as I travelled south I had accepted hospitality from four different people. A hoe costing less than 3s. seemed only a slight return for a night's rest in comfortable quarters, accompanied by a good dinner and breakfast. I parted with my hoes one by one, getting rid of four by the time I reached railhead; another I gave to a friend in Bulawayo, and I regretfully parted with my last to a partner in a firm of railway contractors, who showed me kindness when I broke my journey at Benguela on my passage home by steamer.

I went down to railhead in comfort and with plenty of carriers, for I had twelve hammock boys to carry me the whole way. I spent one night at the Belgian post of Musofi, close to which our traction engine road had now been cut. I did not go direct to Kansanshi, but followed the traction engine road, which made a big detour to avoid a deep spruit. Just over the border, in country free from tsetse fly, for it is all free right out to the west, one of our prospectors had settled. He was not at home when I reached his house, but his wife, the first white woman I had seen for two years, welcomed me, whom she knew to be one of his friends, with open arms. Mrs. Jocks asked me what I would like for lunch, and, seeing real fowls running about, for the native fowl is little bigger than a pigeon, I told her to find me some nice big eggs and some fresh butter and milk from the little herd of cows I saw grazing a quarter of a mile away. I quite forgot at the time that

eggs—large ones—were worth their weight in gold when turned into fowls to sell at Kansanshi mine. I started off with six eggs. Mrs. Jocks saw how much I enjoyed them, and promptly cooked me six more. I felt I could not manage another six, for I was still somewhat of an invalid, so I only let her cook me three after the first two lots. With half a pound of butter (not nasty tinned stuff), two quarts of fresh milk (not evaporated cream with chemicals), and fifteen large eggs inside me, I walked to Kansanshi mine. From the highest point of the old workings I saw the Union Jack flying, and I shouted with delight as I shook my fist in the direction of that bit of blue calico with its yellow star that waved over the Belgian garrison at Musofi post.

Willie Jocks was at Kansanshi, and I was really glad to renew my acquaintance, dating nearly two years back, with the Bwana Musori, as Jocks was known by the natives. In a new country like the Southern Congo, we all had native names, and, in speaking to natives, white men always described each other by those names with the prefix "lord" or "master" in front. I think Willie Jocks had the most interesting name. When he first came out there the natives gave him a name about a yard long. Jocks objected to being addressed by a name of about twenty syllables, so he forbade them calling him by this mouth-filler. The boys asked him what name they should call him. He thought for a moment and said, "Call me the beautiful lord" (Bwana Musori). The name appealed to the natives' sense of humour, for Jocks was the reverse of good-

looking. And to this day he is known throughout the Southern Congo and over the border of North-Western Rhodesia as "The beautiful lord."

On leaving Kansanshi I made for Kapopo, 143 miles south-west and 70 north of Broken Hill. In a vley I shot a reedbuck. As I fired I saw a mob of elephants in the distance. They were mostly cows, with a lot of young elephants running beside them. There were one or two bulls with the herd, which was roughly two hundred strong. It was quite funny to see them start at the sound of my shots, for I fired twice more in the vley. At the sound of each shot they would jump like rabbits, and start off running. I would have liked to follow them, but the game laws of North-Western Rhodesia only allow a man to kill three elephants, for which a £50 licence is required.

An elephant hunter's job is no easy work. When he encounters a big herd he may drop one or two of them before starting the herd on the run; for when once frightened they will keep on travelling, up wind, for days and days more. The elephant hunter who wants to make money must immediately follow up. He, with his boys, must carry nothing but his rifles, ammunition, and matches. He must travel night and day in the track of the herd, stopping only to cook steaks of heart or flesh from fallen beasts, which he washes down with water from the nearest stream. The wind is always right, for the elephants are travelling up wind, and he is always behind them. He must always take the shoulder shot from close alongside, for the frontal and knee shots are out

of place in pursuit. After ten days' running and walking he and his boys will have covered 400 miles and be really done. Perhaps there will be a toll of twenty fallen elephants along the path the herd have made. The hunter goes to the nearest village and calls all the people to follow him, who come to get the meat. As he comes to each carcase he cuts out the tusks and buries them; picking up fresh boys as he goes along, he finds every elephant and buries their tusks. He must then retrace his steps, engage carriers, dig up the buried ivory, and carry it to the nearest large trader. He will probably have travelled on foot 2000 miles, and with luck may have half as many pounds as there are days in his four months' real hard work.

This was my second experience of elephants; my first was a very unpleasant one, and I escaped with my life by a miracle.

I was travelling at night with a full moon. Most of my people had gone on ahead of me during the day. Just before reaching my outspan I had to cross a native garden. I was half-way across the garden when I heard strange noises, and, not knowing what they were, I went on. The air was absolutely still; the moon was right overhead. Suddenly about 6 yards from me I saw a bull elephant, a huge tusker. I realised that I was in the middle of a herd of elephants feeding on the native crops. My heart was in my mouth, for I knew if the elephants broke we should all be trampled to death. I was just as well off whether I turned back or went on. I turned round and tried to catch the eye of each

boy who was following me as I held my fingers over my mouth, the signal for silence. A minute later I had passed through the herd. We were only saved by the breathless stillness of the night.

On that trek to Kapopo I followed the native path and not our traction engine road. As I was hammocking I travelled fairly fast, and overtook my two Australian friends, little Billen and Dave Le Page, who were carrying down £12,000 worth of shed-gold, which had been won from Ruwe. Like myself, they were both on their way home. I did the rest of my journey in their company. We were hospitably entertained by Ullmann at Kapopo. Ullmann had been for a long time trading in North-Western Rhodesia, and his business had developed so well that he had taken his brothers and cousins in with him. He is known to the natives as Tambalika. The occasional rich sportsmen I have met, owing to their want of local knowledge, generally employ drunken and incompetent loafers to run their shooting trips, and miss half the sport North-Western Rhodesia can offer. Should my book fall into their hands I should recommend them to make arrangements for their shooting trips through either Tambalika (Ullmann) or Heri-Heri (Stevenson), another sterling character of whom I shall tell later on, or better, through my friends Austen and Fowler, whose address can be obtained from the Tanganyika Company in London, and they will be sure that these gentlemen will furnish them with reliable white guides.

In the neighbourhood of Kapopo there are two curiosities which want of time and want of money prevented me from seeing. One is a curious lake about 7 miles from Ullmann's place. It is surrounded by high limestone cliffs and is a regular hole in the earth, for the water is very low down.

The natives say the place is haunted, and will not go near it for love or money.

The other is a wonderful swamp of between 100,000 and 200,000 acres, which was inhabited by a quaint race called the Atawa. These people build their huts on piles and spend their days in boats catching fish. They collect the bulb of a swamp lily, which they grind into flour. Before there was an established government in North-Western Rhodesia the Atawa, who were very shy, used to carry on their trade with other races in a most remarkable fashion. They would bring dried fish out of the swamp at night and leave it at certain places on the roads that converged to the swamp. The natives in the vicinity would come during the day, take away the fish, and in its place leave flour and other products of the dry land, which the Atawa would fetch at night. Thus they carried on commerce without ever seeing the people to whom they sold their goods. I have never met any of the Atawa, but I am told that they are almost web-footed like ducks, and that their swamp is the worst place in the whole world for mosquitoes, water tsetse, hippo, and crocodiles. The Government of North-Western Rhodesia are gradually coaxing them out of the swamp, so that they may not be wiped out by

sleeping-sickness, and trying to convince them that they need no longer fear the slave raider, whose work in British territory is now a curse of the past.

As we were going round the head of the swamp some natives told us that Mr. Alan Gibb was crossing it in canoes at the one good crossing, some 15 miles west of our road. Billen urged me to return and catch up Gibb. He said that my knowledge of Katanga would be invaluable to Gibb, and this was my real chance of "getting in" with the Tanganyika Company. Billen's advice was thoroughly good, for Gibb was our newly appointed mining engineer. I foolishly stuck to my idea of going home, and thus probably missed one of the chances of my life.

From Kapopo to Broken Hill we followed our traction engine road. There had been a lot of mining materials and supplies taken over the road. We saw the holes in the sand in which the little six-horse-power traction engines had attempted to bury themselves, and from which they had had to pull each other out. These light engines had not been satisfactory, so later on we used a heavy engine (Fowler's B. 5 road loco), which turned out a real success. As the little engines had not done well, and could not make the return journey, it was necessary to get the heavy machinery up to Kansanshi by some other means. The pieces were too large to be borne on the heads of native carriers, so it was decided to use wagons—a very great expense, for this meant that several span of oxen would have to be sacrificed by travelling through tsetse-fly country.

We took it very easy between Kapopo and Broken Hill, as there was only one fast train a week to connect with the Zambezi express. We did not want to spend even a night in the railhead camp, for little Billen was travelling with the Company's gold, and we all three knew what a lot of possible criminals would harbour round the railhead camp. We made our first camp only a few miles out of Kapopo. After dinner we could hear in the distance the creaking of the wagon wheels, the pistol-like reports of the drivers' whips, and as the wagons drew nearer we could hear the Xosa wagon-boys calling to each ox by its individual name, such as "Englishmān," "Deutchmān." The three wagons bearing the Kansanshi smelting plant outspanned at our camp towards nine o'clock. We had a cheery evening before the two white men with the wagons got down to it for their short night's rest.

Sometimes I regret that I did not take up a wagon life some years ago, for a transport rider's life is a healthy and a happy one. I have lived a similar life when alone on patrol in Southern Rhodesia. The night is still and dry. Rolled up in my blanket by the side of a big fire I sleep lightly under the canopy of heaven. Some little noise disturbs my slumber. In the glow of the firelight I glance towards my horse and then towards the cattle. My horse is picking the choice morsels from the dry wild grass my servant has laid before him. The cattle are lying with their horns facing outwards and softly chewing the cud. I turn my back to the fire and am at once asleep again. At three o'clock—I know the time, for it

is getting a little chilly and the dew is beginning to fall—a boy goes to the fire and puts a pot of water on to boil. A few minutes later, after having eaten a chunk of pulled bread and drunk a cup of steaming coffee, I put on my boots and a warm covert coat, roll up my blankets, toss them on the wagon, and stroll over to my whinnying horse with a nosebag full of oats. We inspan and slowly plod along three hours in the dark. Two hours after sun-up we outspan for the day. I knee-halter my horse and turn him loose. The cattle graze, herded by our youngest voerlooper, a little imp of nine or ten. I am free for the day to bathe or shoot or enjoy myself as my fancy dictates. We inspan again at four o'clock and trek on for two or three hours after dusk. Then comes our six hours' rest at night. A transport rider's life is well worth living, for after the rains have been on a couple of months he rests his cattle on his farm, and puts in three good months enjoying the so-called comforts of our false civilisation.

The wagons left us long before we rose. The wagon-men were lucky that night in not having to turn out after lions, for as we marched on our way southwards we saw in the dusty road the foot-prints of two lions, that for 10 miles had walked behind the wagons the night before. There was a lot of game about, more than we could possibly want. Near our last camp, some 12 miles out of Broken Hill, we ran into a herd of eland of between seventy and eighty strong. A fine bull and a juicy young cow fell to our rifles. Killing more would have been wanton slaughter. That night we boiled down some 20 lb. of eland

fat, we salted a brisket of eland for the train, and enjoyed a feast of eland marrow. It seemed impossible to get away from the Copper Belt of Katanga. From the chest of the bull eland I cut out an ounce ball of pure copper which some native hunter some years before had fired into that eland.

I saw the Victoria Falls again, I recrossed the bridge, and put in a few hours at Bulawayo before the express started.

One little story I heard on the train will carry me to Cape Town. On a previous journey of the Zambezi express there had been no ice in the refreshment car. One returning wanderer had said that he would give five bob for a lump of ice. A Jew boy asked him if he meant it, and was answered "Yes." The Jew boy went and fetched a lump of ice, and was given his five shillings. Every one on the train wanted ice at five shillings, and the Jew boy did a roaring trade. Finally, the last day the Jew boy regretted he could not comply with any more orders. He was asked why not: "The conductor says if I take any more ice off my brother he won't keep till we get to Cape Town."

CHAPTER XI

Portuguese Slavery in Angola

The Union Castle Line had a monthly service to England of intermediate boats which called in at Lobito Bay. I took a passage to England by one of these boats, travelling steerage; for I had gained nothing by being in the Tanganyika Company's service except a lot of experience and knowledge, which I knew could not fail to be of use to me later on. I arranged with the shipping company to break my journey at Lobito Bay if I desired to do so.

We were too far out in the ocean to see anything of the shore line of German South-West Africa, nor did we stand in close enough to see the town of Mossammedes, which is the capital of the southern province of Portuguese Angola, and lies just north of the German territory. I had very much wanted to see Mossammedes, for the Portuguese had had some pretty stiff fighting there with the natives, who belonged to a race similar to those (the Hereros) who gave the Germans so much trouble farther south; and in the Portuguese war against the Uvambos a column of white Portuguese troops had lost 250 men killed. I was told that the country at the back of Mossammedes was splendid cattle country, inhabited by some fine warlike

races (the Kinyamas), who had successfully resisted the Portuguese slave raiders. I also wanted to see Great Fish or Tiger Bay, which I believe to be the very best harbour in Africa.

We picked up the coast-line a little south of Benguela, a miserable country, for I could see nothing from the ship but stretches of white sand, a little low scrub, and bare, barren hills. We saw St. Philip's bonnet, a small promontory in the rear of which sheltered the city of Benguela. Thirty miles farther on we rounded the head of the sand-spit that formed the harbour of Lobito Bay. We moored to a little wharf at the landward end of the sand-spit. The wharf projected less than 200 feet into the bay. Between the wharf and the shore was lying another steamer almost touching the sand-spit.

Lobito Bay is certainly a unique harbour. The sand-spit is about 100 yards wide and 3½ miles long, and covers a reef some 20 feet or so below. This is the natural breakwater that forms the harbour. To the south is a dank and loathsome mangrove swamp. On the landward side of the swamp at the end of the harbour was a stretch of flat sand on which stood the huts of a few fishermen (Chibebe village). To the north, stretching as far as the eye could reach, were cliffs 250 feet above the sea. It is a fine landlocked harbour, deep water everywhere, even close inshore—an ideal port for Africa's first trans-continental railway, from Beira to Benguela.

I had the good fortune to run into a friend with whom I was at school, and who had been one of the surveyors in North-Eastern Rhodesia.

My friend took me a row round the harbour and up one of the channels in the mangrove swamp, where I saw oysters hanging on to the roots of mangroves, which were pushing their way into the sea water. In the evening my friend, having obtained permission, took me to dine with the contractor's representative. The dinner-party was quite a big affair, for everybody who thought themselves anything had come down from Benguela by train to witness the arrival of the South African steamer. After dinner I showed my one remaining copper hoe to prove that there was no deception, and that I had come from Katanga, the objective of the Caminho Ferro di Benguela. One of the crowd that had taken our wagons through to Ruwe found me quarters for the night.

Lobito Bay was then no place for the white man to live in. At the north end of the sand-spit was a little lighthouse, beside which a small slaving-schooner was lying. In the centre of the sand-spit was the contractor's hospital. At the base of the sand-spit was the European drinking-shop, which called itself an hotel. Facing the contractor's office buildings, above which were the European quarters, stood a bandstand.

The bandstand looked very forlorn and horrible and out of place. It had been erected for the celebrations given on the visit of the Portuguese Crown Prince, the boy whom the Portuguese killed with his father, the King, two months later. There were about fifty tents of white employees on the jigger-infested insanitary sand between the mangrove swamp and the sea. There were also engine sheds, a native location, the contractor's big

stores. I left Lobito Bay by the first train in the morning.

The railway ran along the edge of the beach, and after going about 9 miles we got into cultivation near the mouth of the Catumbella River, which was crossed by a big iron bridge. I saw the sugar-canes that grew in the stretch of irrigated sand-flats lying between the sea and the downs. Sugar-cane-growing in Angola is a great industry. The sugar-cane is not grown for sugar, but to ferment and distil and make *aguardiente*, the vile spirit with which the Portuguese have corrupted and conquered Africa.

Benguela, which we reached after a two hours' run, was a flourishing city over four hundred years ago. It did not impress me very much on my visit. The little fort that commanded the entrance of its miserable harbour was in ruins and its convict garrison in rags. The fashionable part of the town was a big plaza, a dusty, dirty square. The Governor's palace was on the west side of the plaza. On the south side was the principal hotel of the place, which had a first-class bar. At the back of the bar was a big gambling hall, in which two roulette boards were always going. I did not like Benguela, although I was most hospitably entertained at the Casa Inglesa by the Tanganyika agent, who was also a British Vice-Consul, and a gentleman who shared the building with him, my friend of last night, who was one of the happy crowd of cattle owners and transport riders, the true leaders of Angola.

Everything disgusted me in Benguela. It was a heartrending sight to walk past the prison,

which was close to the gambling house and Governor's palace and faced on the great plaza. The windows of the prison had bars running across them, across as well as down, and on the net of iron thus formed white men and black men alike held on by their fingers and their feet as they looked out into the street. Angola is a convict colony, and every foreigner should have a passport there, for a man who cannot give a good account of himself goes into gaol at once; in fact, the prison of Benguela resembles the Bastille of a hundred and twenty years ago. True, *lettres de cachet* are officially unknown, but a bribe of from £5 to £50 given to a Portuguese official might put any enemy into gaol. Once a man is in gaol he comes out "manãna"—the Portuguese word for "to-morrow," which, translated into action, means "never."

Slavery is rampant in Benguela. Ownership and prices of slaves are openly discussed. Some of the Tanganyika men had returned up to Katanga *via* Benguela. They had found it cheaper to buy slaves as carriers for the journey than to engage free labour. The action of these employees of the Tanganyika Company is quite defensible. There was scarcely any free labour, and such free labourers as there were, they could see, were absolutely unreliable. The greater number of free labourers are thieves and drunkards, and, worse than this, they have the vilest morals. Slaves are docile and, if well treated, willing, and they can be relied upon not to desert their European employer in crossing the hungry plain of Angola. Throughout this stretch of 250 miles the Portuguese

slave raiders have destroyed every vestige of human life.

I stayed with my school friend a couple of days in his house above the Lengue gorge. The railway through the gorge was a wonderful piece of engineering. Four miles east of Benguela was an opening in the barren hills, a gorge surrounded by high cliffs, which centuries before had been the path of an ancient watercourse. It was dry now; for just north of Lobito Bay was the apex of the continuation of the great Kalahari Desert of South Africa. Through the Lengue gorge the railway climbed on a gradient of one in sixteen to the high desert country above. Such a climb had to be made by means of a rack, such as they use in the funicular railways of Switzerland, and there were two big engines with cog-wheels to grip the teeth in the centre of the track. These engines took the trains two cars at a time up and down. A little while before an engine driver, returning with an empty construction train from the summit, had not pulled up in time and headlong had rushed down the rack. Below a precipice in the gorge, by the side of the track, lay a locomotive with a dozen trucks piled on top of it—a tangled mass of scrap iron.

When the Benguela railway begins freighting copper down from the great Katanga Copper Belt this rack will have to be cut out. My friend discussed with me a route to climb the downs without a rack that looked easy, but with a lot of bridges on it; for it followed the hills hollowed out by hundreds of dry watercourses to the south of Benguela. My friend and I were both keen geographers

and we did not bore each other talking "country." How my friend had arrived at the position of acting chief engineer is a story worth telling. He had landed some months before at Lobito Bay and had asked the contractors for employment. He was told that if he could find a way to avoid a zigzag that the engineers had had to make when they got into difficult country 100 miles farther on, they would give him £200. Sixteen days later my friend had cut out the zigzag and so saved the railway £100,000 worth of earthwork.

I went up the Lengue gorge in one of the railway motor-cars and on to railhead. The building of the first stages of the railway, I could see, had been no easy job. Above the gorge the railway wound its way between granite tors through the red-hot sand in which grew quaint cacti, thorn bush, and all the typical flora of a desert country. The railway builders were 58 miles inland before they struck the first water. All the time they were working their survey parties and their sub-contractors' camps had to be supplied with water carried up by bullock wagons. Drink there was in plenty, for the lowest-class Portuguese ran up bothies by every camp and sold *aguardiente* to the workers. The workers were free labourers. Those that came from Senegal (French) were good, but the Cape Verde boys from the Portuguese islands were a pretty hard crowd to handle. Murder and robbery were rampant. The Portuguese police were a hindrance rather than a help, for many were low-down blackmailers, while others were

ignorant, incompetent, and indolent. Even as I passed up the line I heard of a theft of £300 from a sub-contractor, three murders amongst native workers, and saw drink-shops at every 5-mile camp.

The British Consul-General for the West Coast, Mr. Mackie, was taking a trip to Bihe in the interior of Angola to report on the Portuguese slave traffic for our Foreign Office. He had got a white man for his companion, but, nevertheless, invited me to come with him as well. I was in two minds about going with him, for although I wanted to get home to England, I also wanted to satisfy my craving for travel and adventure. Had Mackie not been loaded up with an unnecessarily large supply of tinned provisions, and had he had good arms with him, I should have done the journey. As it was, I went ahead of the sub-contractors and the surveyors, and then regretfully turned back, with only two carriers and the mule I had borrowed. Before I turned back I had got into the high country that was typically the same as the highlands of the Southern Congo, differing only from them in that the vleys instead of being narrow were huge big savannahs of rich rank grass, such as is found in the Argentine.

On ahead in this country a hundred and sixty Transvaal Boer families were settled. Before the South African War, all the grazing land in the Transvaal had been taken up, so a group of "by-oners" (landless people) and voer-trekkers (pioneers), some eight hundred strong, counting the women and children, trekked with their cattle and wagons through the Kalahari Desert

in search of a new grazing country. They took five years to reach their destination. They travelled during the dry season. During the rains they anchored down at some little water hole in the desert, and grew a crop of mealies (Indian corn), each year resuming their march. The Boers did not love the Portuguese. The Portuguese would not give them any title to their lands, and tried to make each Boer pay a £5 tax on his rifle.

Till the railway builders came these Boers had neither money nor markets. The railway work was a godsend to them, for it was their wagons that carried supplies and barrels of water on ahead of the rails. These Boers were now in possession of a little money, and the Portuguese now seriously tried to enforce the £5 tax on rifles. A Boer who had come down with his wagon to Benguela had his rifle confiscated by the Portuguese police. For a long time no Boers came down. One day forty wagons came into Benguela, and the Boers walked about the city in small groups, each man carrying his arms. The Portuguese thought better of disarming them or of trying to collect money from the Boers.

A very cheery group of Britons, whose leader was Major Boyd Cunningham, had settled down after the South African War in the interior of Angola, near the head of the Kwanza River, on the direct route between Benguela and Katanga. They had purchased many cows farther south in the Portuguese territory from the natives, with whom the Portuguese were continually at war. They had imported some good breeding stock

from Cape Colony. When I was in Angola they had a big mob of cattle, the nucleus of which will one day be great fortune for them all. They called themselves the Angola Land Trading and Transport Company. They were generally referred to in ordinary conversation as "The Wagon Crowd." The Boers in Angola looked to The Wagon Crowd as their natural leaders, for when Cunningham and Brown took wagons through from Benguela to Katanga six out of the nine wagons belonged to these local Boers. It was The Wagon Crowd who engaged the Boers to do transport riding for the contractors. When I was in Angola, The Wagon Crowd were organising their big trip, in which they took twenty-seven wagons through to Katanga.

I rode back along the survey and construction camps with the contractor's representative, and together we returned to Lobito Bay. I did not want to travel by the Portuguese steamer, which was conveying about two hundred slaves to St. Thome. In consequence, I had to wait for the next English steamer from Cape Town. I, therefore, asked the contractor's representative to give me something to do. The work he gave me was of a confidential nature then, but now that nearly seven years have elapsed there is no reason for concealment.

I engaged a cook and a personal servant. I obtained from the compound manager of the contractor's native location, near Lobito Bay, twelve carriers, three of whom were Bantus, the other nine being Negroes from the Cape Verde Islands. I drew what instruments, foods, and equipment I wanted from the contractor's store. In one

day, mapping my route, I did the 26 miles to my destination, and camped at the Hanha River, about 5 miles from its mouth. Here there was a big plantation of oil palms along the swampy valley of the Hanha. Adjoining this swampy valley was a huge dry valley. From these two valleys the Hanha ran through a series of gorges into the sea. I found the narrowest place in the gorges, and on a little rock about 70 feet above the river I measured the gorge across. It was about 125 yards wide. I measured a 500-yard base line on the flat, triangulated both valleys, sketched in all the land topography, and then ran a line of levels down to the sea.

Then my troubles began. I had seven years of experience with natives, and I never had to flog them, for the native understands that he must not play the fool with me, and we always got on very well together. The morning I was starting to level into Lobito Bay, I went out of my tent and found one of the Portuguese boys mimicking me to his brothers. I promptly kicked him. He picked up a huge log of firewood and went for me. I managed to get the firewood away from him, and with my cook and the three Bantus secured him. The other eight who were Negroes promptly deserted and went off to Lobito Bay. The Portuguese had a customs look-out post with a coastguard in charge at the mouth of the Hanha. This coastguard had a small house near to my camp. I was really glad he was at his house instead of at his post that day, for I was able to hand my prisoner over to him. Luckily all the villagers in the Hanha were Bantus, and I

had no difficulty in persuading some of them to come with me to Lobito Bay. I had hard work ahead of me, for I had to level 26 miles without water, except what we could carry ourselves. In two days' work I levelled 8 miles out from my camp. Then starting before daylight I walked 8 miles before sun-up. Working hard, I levelled 10 miles that day to where I had told my carriers to camp and bring a barrel of water with them. It was plain sailing then to Lobito Bay.

I handed in my map with levels and my report, and told the contractor's representative about my trouble with the Cape Verde boys. He expressed his great regret that I had been given Cape Verde boys, who, he told me, had given more trouble than all the labour imported from British and French possessions. It is the disgraceful state of the free labourer in Portuguese territory that is the only justification for employing slaves. The free labourer had been corrupted by the Portuguese grog-seller and the example of the vicious scum of white men that the Portuguese have brought into Africa.

The contractor's engineer and one of the partners in the firm were enthusiastic over the information that I had furnished them about the Hanha, for they saw that a dam would be cheaply constructed across the gorge which would hold up a fabulous amount of water and be able to supply the future trans-continental terminus of Lobito with water, power, and light. I suggested that instead of travelling there overland we should go by sea.

On the contractor's launch, towing a surf boat

alongside one morning before daylight, we steamed out of Lobito Bay. As I passed the lighthouse at the end of the sand-spit I saw the slaving-schooner lying inside the sand-spit. Three hours' steam took us to the mouth of the Hanha. There was very little surf running, and we disembarked on the beach without trouble. We had a good hard day looking round the Hanha valley, and walked many miles before we returned to re-embark in the launch. It happened, that although we had several natives with us, none of them or any of the other three white men had ever experienced a surf landing. I did not know this till we had had a narrow escape of a serious accident in launching the boat, for the wind had caused the surf to run. The white men had taken their shoes and stockings off, and I was standing by the side of the boat rolling up my trousers waiting to give the orders for the launch. My back was turned, and I was stooping, and I did not notice that the boat's head was not true with the breakers. An incoming breaker struck the side of the boat, and, in a twinkling, scoff boxes, oars, and loose gear were sent flying on the beach with the boat after them. I luckily jumped in time to avoid being crushed by the boat. Only one white man got hurt, the blade of an oar hitting him in the chest. We gathered up everything, turned the boat over, and this time I took care she was held with her nose straight to the breakers. I waited nearly ten minutes to judge a big enough wave on which to make a successful launch; then telling my crew to be ready, I gave the order to run her out, and we passed through the surf without any mishap.

It was after dark when we headed for Lobito Bay. I was steering on to what I thought to be the riding-light of the slaving-schooner, for I had known that she was inside the sand-spit in the morning. Such a miserable light did the Portuguese lighthouse throw that it was not as strong as the slaver's masthead light. Almost alongside of what I thought to be the schooner, the engineer shouted to me that I was piling the launch on to the sand-spit. I ran the wheel hard round sharply, turning the boat landwards. I then realised that the slaving-schooner had gone outside the sand-spit and was making ready for sea. There were lights on the cliffs to the east, there were the lights of the cliffs below, and I felt sorry that the British gunboat *Dwarf* had left her moorings a day or so before, for the secret embarkation of slaves to the cocoa islands was going on, as was proved by the slaving-schooner's absence in the morning.

I am no sentimentalist about slavery. I do not object to domestic slavery, which is practically a feudal system. In the absence of railways and banks, I do not object to the use of slaves for carrying goods between the interior and the coast, for such a form of slavery has been the economic system of Africa from time immemorial. I do object to the brutal exploitation of men and women to enrich the Portuguese cocoa planter and the European cocoa and chocolate vender. This supplying of slaves to the cocoa islands, although carried on under the euphemism of indentured labour, is virtually the same as the open slave-trading that made the Portuguese prosperity of the past.

Picture to yourself the quay of the old-world town of Benguela—a quay inferior to that of the smallest English seaport. Moored alongside the quay lies a brigantine of 400 tons burthen. A plank gangway connects her with the shore. Long streams of wild men from the interior, tired, thin, and timid, roped hand to neck, are waiting to be embarked. A motley mob of men-at-arms stand round, leaning on their arquebuses. A prelate of the Catholic Church—the Church that to-day is doing the best work in Africa—stands beside the gangway. By his side is a tub of sea water. He has a contract with the King's Lieutenant-Governor to baptize each black exported to the Brazils. In single file the slaves move forward. "In the name of the Father, of the Son, and of the Holy Ghost," and a cut from the capitao's hippo whip passes each new member of the Church of Christ into the slaver's hold, and so with each successive convert.

The Portuguese system is the curse of Africa. It still goes on. Able-bodied men caught a thousand miles inland over the Congo border bring £7 in trade goods (£3 in cash) to the Walenzi and Batitela raiders. The intermediaries, Portuguese half-castes and Mabunda, resell them to the Portuguese in Bihe. By the time these men reach Benguela, carrying down ivory, beeswax, or rubber, they are worth £18 to £25 spot cash. In Benguela such of these men as are not wanted by the local traders and farmers are shipped to the cocoa islands. Everything is done in legal fashion. The men are happy and pleased, for they have been given some days'

rest and plenty of food. The nature of the contract they are about to make is fully explained to them by an interpreter before a high Portuguese official. The interpreter tells them that they will work for five rainy seasons and then return with great wealth to their homes, over 1000 miles away. The Portuguese interpreter draws his small commissions, which substantially augment his pay. The high Portuguese official draws a larger commission. The labour recruiter pockets a cheque for £25 a head for each labourer, who receives exactly one-seventh of the wages paid to free labour. Their Portuguese employers take good care that the *serviçaes* (as they are now described) spend their wages in drink and are always in debt. The *serviçaes* used never to return to the mainland, for no Portuguese planter would willingly free a slave. On the islands they either died or got acclimatised and worked on while life lasted without change, without pause, without hope.

On the islands everything was crude, and the charges of slave-owning and slave-dealing are easily proved against the planters of St. Thome and Principe, who are making £2,000,000 a year out of selling cocoa. On the mainland the conditions are worse than on the islands, but it is much harder to prove anything against Portuguese, for slave-owning and the forwarding of slaves are carried out in such a refined form that it takes an expert to recognise a batch of well-dressed, well-fed, and seemingly free-going natives as slaves. Repatriation from the islands is an even worse crime than all the others that can be

charged against Portugal. Five hundred *serviçaes* each year are brought from St. Thome to the mainland. Very few have any money. Those that have been given money usually have it stolen back from them by some Portuguese convict in the employ of the Government, for it must be remembered that Angola is a convict colony. These repatriated slaves cannot find their way to their homes 1000 miles inland. They are either re-enslaved or die of starvation, for no one will employ them at wages. In the outskirts of the cities of Loanda, Nova Redondo, and Benguela the luckier ones get lodged in prison, where at least they can get food.

European statesmen have drawn up international Acts, "in the name of Almighty God": but still, unheeded, cocoa planters and convicts carry on the trade that enriches themselves and certain scum who sell stocks and shares in Europe. With all the facts they have at their disposal, if our Foreign Office still refuses to act, the name of our Foreign Minister, in spite of his known integrity, must go down to posterity as conniving at this wanton waste of human life and conspiring with the other European Chancelleries to keep going this nefarious traffic.

I was glad to see the boat from Cape Town steam in, and to leave Angola, on my way back to England after nearly five years' absence.

CHAPTER XII

UNDER THE BELGIANS

MY visit to England proved to be useless. I got no promise of any definite appointment from the Company, but believed so strongly in the future of Katanga that after a short stay I decided to return at my own expense, in spite of friends and relations pointing out that there were other and better countries in the world and less inaccessible.

Charlie Grey came to see me in London. I was really glad to meet him and see him looking so well and hear from his own lips that he was sanguine of complete recovery. We then talked Katanga. I told him of Hardy and myself, how we had founded a station—now the sanatorium of Katanga — in the happy valley. I dealt entirely in geography and economics; my own mapping and the mapping of others; how the cotton grew wild below the escarpments; of other wild plants which had an economic value, of birds, beasts, and fishes. But here Grey came in. He, like our common friend Hardy, was an enthusiast on fish; he bore out all Hardy's wonderful stories of the fish in the Lualaba. He told me stories of the tiger-fish fiercer than sharks and apparently even more game than tarpon, of

the wonderful electric-fish, which when wet and fresh from the water will almost paralyse the man who touches it (and whose skin, even when dry, will give a powerful shock). He spoke of many others, of otters and the teeming life of the great waters of the Upper Congo. He showed me photos of the wild Balubas, by whom he was looked on, not as a friend only, but almost as a god. I could not get him to talk much about his fight with the slave-raiding Batitela, but he showed me the trophies he had captured from them—bugles, drums, flags, arms of precision, and other paraphernalia of an organised army. He was enthusiastic about everything, and no wonder he returned to the country to carry on the good work started by his brother, under whom, despite the anomaly of the wages, we were all a happy family.

I also met several people who had helped in the development of the country—one of the men who took the wagons through from Lobito Bay to Ruwe (some 1200 miles), and Holland, the discoverer of Kambove mine, or, rather, the first European to visit it. Holland had been with the Tanganyika Company in North-Eastern Rhodesia, and then had run for the Company the prospecting to the west of a strip of country some 70 miles wide on either side of their railway route from Katanga to Lobito Bay, an area of over 140,000 square miles. He told me much of the misrule of the Portuguese in Angola, and it was owing to the native dread of the Portuguese slave raiders that one of his prospectors lost his life.

But my time in England was now drawing to

a close, and early in 1908 I arrived at Broken Hill.

Broken Hill was in a bad way when I got there. The Northern Copper Company had entirely failed in separating the lead from the zinc economically in the big deposits at railhead. The railway construction northwards had been stopped for well over a year. Consequently the distress was great, and there were numbers of really good men living on Kaffir foods and very little removed from destitution. The only bright feature was a swarm of some hundreds of natives coming in with Congo rubber which Texeira de Mattos had won from the forest in the food-trading centre opened by him west of the Lualaba. Needless to say, this prosperity was ephemeral; for the Belgians soon found a way of getting Texeira out of the country.

The railway had not gone through "fly" country at all until it reached Broken Hill, but 12 miles north of Broken Hill began "fly" country, and on ahead lay the biggest "fly" belt in Africa.

I mentioned before that we had taken two light traction engines up to Kansanshi. They were not a success. In North-Western Rhodesia the Northern Copper Company had been very successful with heavy engines, and a New Zealander named Nichols had done exceptionally good work in leading the engines. I had met Nichols in Katanga before I went home, and had got friendly with him, as I expected to be doing a lot of work finding and cutting roads for him. He was at Broken Hill on my arrival, having with a

little private syndicate in Bulawayo bought three Fowler's B5 road locos. The syndicate had taken a contract to transport our goods north at £42 a ton, and to bring copper down at a very much smaller rate. Nichols was engaged in disembarking his engines the day I started north. In order to save money, I cut my kit down to a minimum, and left the heavy stuff with Nichols to bring along.

Within thirty-six hours of my arrival I had started north. I had four carriers and two servants. In my servants I was lucky—for one of them was my old boy Musa. Musa was working for a white man at Broken Hill, but the white man kindly lent him to me for my journey, with permission to keep him if I wanted. My cook—a very good one—was an Atonga native named Yavan. On that journey I was exceptionally well off for arms. I had a light shot-gun and a Gibbs falling block ·450 Express (both second hand), also a brand new 9 mm. Mannlicher-Schonauer of the very latest model, with three hundred rounds of ammunition for it. Having no tent, I made each night a little screen of boughs round my bed. Living like this is very comfortable; for during the dry season it is almost breaking dawn and time to march before the dew begins to fall.

Just south of the Congo border the Chartered Company had a government post called Ndola, and I went there to call on the magistrate. It was an important place, for near by lived an old reprobate of a chief named Chiwala who had been a great slave-dealer in his time, and who, even then, was a power in the land owing to his former

business connections in distant parts of Africa. There was also the Bwana Mkubwa, a mine of the Northern Copper Company. Thus there were the makings of a town of some importance, for it would be somewhere near here that the Rhodesian railways would branch north and west, one line going to Lake Tanganyika and the other through the Copper Belt, and then on to Lobito Bay.

After leaving Bwana Mkubwa I had a surfeit of meeting people. Bertholet, whom I passed between breakfast and lunch, gave me a real surprise. Before in travelling he had averaged about 6 miles a day. Now he was averaging 35 on foot with relief carriers. It was very creditable, but how much of the credit was due to English example, and how much due to his anxiety to meet his wife, was hard to say. He tried to dissuade me from going to Katanga, telling me he had nothing for me.

I camped that night at the small vley in the British territory, the last water before the border. I had barely got fixed up when Harold Cookson arrived and camped alongside me. I was glad to meet him, and it seemed like getting home, for I had some time before begun to look at Katanga as my home.

Cookson told me all the news. Things did not seem bright. However, he was sanguine. He was going home to try and get a contract to put on the boundaries of the Copper Belt and Tin Belt. We went into figures, and found that together we would be able to do as much work in a year and a half as a couple of Belgians would do in twelve, and also do the work far better. I

was keen, too, on putting on the boundaries of the 5000 hectares round each copper mine. That meant 4000 miles traversing, 200 observations for azimuth, and about 200 days travelling and doing office work. I calculated three and a half years for this work. Cookson thought he could do it in less. Finally I arranged that if he got the contract for the big work of the boundaries, I should go in with him. He was also more sanguine about a big find of gold in Katanga than I was. He insisted that the country was not half prospected. I thought differently, but believed that a more thorough search of the Iron Hills between Musofi and Ruwe was desirable.

There were more meetings on the road. Three or four poor devils of white men out of work and with neither money nor resources: the two young Belgian engineers who were on their way home after completing the water survey. They were incompetent boys under a drunken leader when I saw them before. They were men now, with a swing in their walk and pride in their faces, and —always a good sign—the natives spoke well of them: later on a Greek looking for work. He had collected about thirty boys, who, seeing me, promptly left him and came to me. The day I left the Greek I met Alan Gibb, who in our language was IT. Gibb and I camped together, and over dinner discussed things. He told me that I should find it hard to "get in" again, as there were so many good men waiting for jobs. I suggested some schemes outside mining, such as growing native foods on a wholesale scale and doing the ploughing and other work with oil-driven machines. Gibb

told me to write to him in London about it. I liked Gibb very much, for he was a sound man and absolutely straight, but personally I held that expensive mining engineers were not wanted in the earlier stages of development in Katanga.

We had both at Kolwezi and at Kansanshi solved the problem of smelting copper. The natives had solved the problem long before. I could see no reason why we should not develop our own ideas and improve on the native methods. By this I mean we should have mined and quarried in the simplest and most economical way possible, that we should have used water-jacket furnaces, assayed for silica, not for copper, and picked all the "eyes" out of each mine. As there were over two hundred mines (one of which, Kambove, had a cross cut at the 100-foot level of 437 feet with ore still in face and much of the mine running 40 per cent. copper) it would have taken some hundreds of years to work them out on these methods. However, no mining engineer who was worth his salt would tolerate these methods. For if later on some means should be devised of handling the siliceous ore it would not be a good thing for his reputation. Moreover, the successful solution of smelting the siliceous ore meant a very much bigger thing for the interests of those for whom he was working.

Some 30 miles out of the Star of the Congo Mine (now called Elizabethville) I made the acquaintance of Stevenson, a man whom I had long wanted to meet. Stevenson is quite a character, being a man of great personality and thoroughly upright. He had been one of the

magistrates in Northern Rhodesia. When George Grey went home some two years before, he had persuaded Stevenson to leave the Government service to open up the East Lufira district for the Tanganyika Company. Stevenson was now firmly established as trader, transport agent, labour recruiter, and native food-buyer. The natives knew him as Heri-heri or Chirapula—my meeting with Heri-heri will always remain vivid in my memory.

I had arrived at a native village at about three o'clock in the afternoon, and was going to trek on another 4 or 5 miles, for I do not like camping in old camping-grounds or near villages. On one side of the village was camped a Belgian official. On the other side of the village, Heri-heri, without the Belgian official's knowledge, was holding a court. Telling his servant to give me a chair, he motioned me to sit down beside him, and continued the hearing of the case. After hearing all the evidence, Heri-heri turned to me and said, "I would like to punish the girl; however, I cannot see my way to do that." Then turning to the chief and the assembled natives, he gave his decision, which was that the offender should pay 8 yards of calico to the aggrieved party. Stevenson's decision was greeted with tumultuous clapping by the two hundred natives who, seated on their haunches, were present at the hearing. The smiles of satisfaction and the cries of, "We hear, my lord," proved to me the high opinion in which Stevenson was held. I wondered what the Belgian official thought of it all.

The next day I reached the Star. There was

little encouragement to be got there. No white man was doing real work except a poor boiler-maker, who was cutting 60 miles of traction engine road under the direction of the mine surveyor; Hurst, the diamond drill man who was working in various places, and my friend, little Billen, who had recently returned from Australia. Billen was sinking and timbering a three-compartment main shaft, driving several cross cuts at the 80-foot level, and running the whole surface work of the mine. The business of the other eight or nine white men there appeared to be getting food for the six hundred natives working, selling them calico and keeping interminable accounts. If George Grey had been there, I think he would have dismissed 90 per cent. of the idlers. At the Star, where I spent one night, I, of course, stayed with Billen.

Poor Billen! He was in great trouble then, for he had an unfortunate accident. A raw boy who was carrying his shot-gun managed somehow or other to cock it, let it off, and blew off the head of another native. Later on Billen was tried before the Belgian judge at Lukafu for *homicide involontaire*. He was sentenced to three months' imprisonment and a £40 fine. He paid the fine and appealed against the sentence, giving a substantial bond that he would not go out of the Congo. Luckily the mail down to Boma, the capital of the Congo, took about two and a half months. Before the news came through confirming the sentence, Prince Albert (now the King of the Belgians) visited the Star. A memorial signed by all the Belgians was put before the Prince,

asking him to persuade his uncle, King Leopold, to extend to Billen the royal clemency. Billen was given a free pardon and the conviction against him cancelled. The Belgians were all very much against this law of *homicide involontaire*, for, as one Belgian put it to me, "If I knock a boy down while bicycling, and kill him, no matter whether my fault or not, the judge must give me three months' imprisonment and a £20 fine." [1]

My last 100 miles on to Kambove, which took me five days, were uneventful. It was an interesting trip, however, because I had no map of the route, and in consequence for my own benefit I carefully mapped in detail every inch of the way. That was quite a strain, for on my way up not only had I been mapping, but I had also been generalising and trying to co-ordinate with Charlie Grey's work points which I had determined on the Congo-Zambezi Watershed, the International Boundary (then undelineated) between North-Western Rhodesia and the Southern Congo. I was glad when I reached the Lufira, on that journey, for at my first two camps there were lions round each night. At the Lufira I had a good night's rest, sleeping in the newly erected rest-hut.

I found at Kambove things were at sixes and sevens, and I could see that Bertholet, who had gone down to railhead to bring up his wife, had done his best to get rid of every Englishman who had either ability or initiative. Some very inferior Belgians had been sent out. I do not suppose there were a dozen Belgians in all then in the service of the Union Minière. Anyhow,

[1] See p. 84.

five of them in the six months that I had been away had succeeded in getting themselves buried in Africa. *Par parenthèse*, I mention that the Tanganyika Company, with an average strength of thirty white men, only lost one in the Congo in eight years. The Belgian death rate was a hundred and sixty times as great as ours.

Watson duly kept his word and employed me on my return, giving me mapping work. I was just arranging to extend our triangulation and make a large scale map of all the country round Kambove, when I was asked by the acting manager for the Belgians to bridge the Star-Kambove road. Such work was imperative if we were to keep up our communications with the south during the ensuing rainy season; also it was better than office work. I left Watson and joined the Belgians.

I decided to begin work by bridging the Mpanda River, which our road crossed just by Kanionina's village. It was this river that had given me so much trouble to cross on my first arrival in the Concession. I saw that unless it had a good bridge over it our messengers and carriers might be held up for days on their journey from the Star, which in less than two years from that time would be the railhead of the South African railway system. At our crossing the river was too wide to bridge, but a few yards farther north at dead low water it was only 52 feet wide. The highest flood marks showed the river to rise 14 feet. The east bank was about 25 feet above the river. The west bank was only some 8 or 9 feet above the water, and

on the west bank was a small flood plain. I determined to make a bridge that would be 4 feet above the highest flood and of a single span, so that there would be no danger of its being carried away.

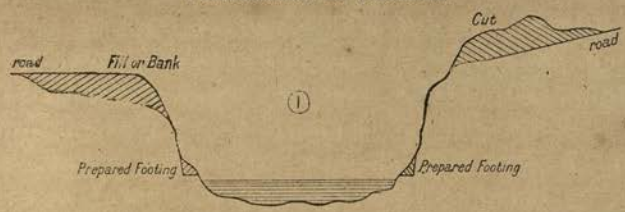
I had an unpleasant episode at Kanionina's village. The effect of the Congo atrocities had been to cause the Belgians to look for cases of cruelty, and they were specially keen on getting cases against Englishmen. Although there were less than thirty of us in Katanga, in a few months after my return to Kambove five of us were tried by their courts for violence. In none of the cases were the Englishmen to blame. Our doctor was tried, the English compound manager at Kambove was tried, and I was compelled to take action against a native which resulted in my trial later on.

While working on the bridge I had a great many visitors. My old capitao, Charikosa, found me out and asked me to take him on again, only stipulating that I would give him £1 a month instead of 17s. 6d. he was then receiving. I was only too glad to have him, for I had had to send my personal servant, Musa, back to Broken Hill for quarrelling with my cook, Yavan, and it meant much to me, for a really trustworthy native is invaluable to a white man in Africa. Charikosa had once before refused to come to me, saying I worked people too hard and paid too little money.

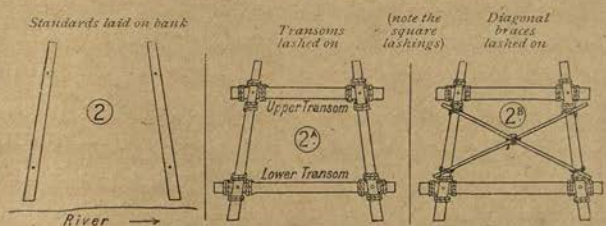
Life was sometimes lonely and dull, but occasional incidents relieved the monotony. One of these was a serious earthquake. It was a Saturday afternoon, and all my people had received

CONSTRUCTION OF DOUBLE-LOCK (OR FRAME) BRIDGE

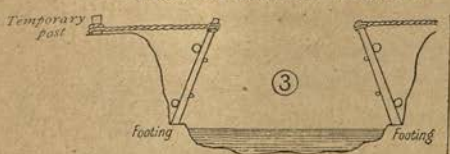
Preparation of Crossing.



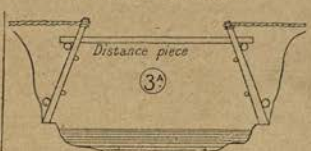
Completed Trestles.



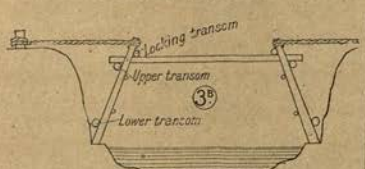
Trestles held in Position.



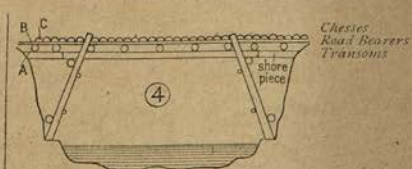
Distance Pieces laid on Upper Transoms.



Bridge Locked.



Bridge Completed.



J. B. Thornhill, *January 1915.*

[*To face p.* 208.

1½ yards calico each for "posho." "Posho" is the money or trade goods which is given to each native on Saturday (if he is not given rations) to purchase his next week's supply of foods from the local villagers. There was no one in my camp except my cook and my kitchen-boy. I had just finished writing a letter home. On the table stood my only tumbler and an uncorked bottle of black ink. Suddenly there was a rumbling boom. It seemed as if I was sitting down on board ship, for the ground rose and fell in waves. My bottle of ink fell over, and the glass tumbler—such is the perversity of things—lighted on the only stone on the floor of my tent. I unhitched my compass from off my belt and rushed out to take a bearing of the direction of the earthquake. My cook was outside in throes of laughter. This quite surprised me, for I thought that natives would be frightened at an earthquake. I went back to my tent, opened my tin uniform case—I always have tin boxes in Africa on account of white ants—took out a bottle of red ink, and added a postscript to the letter which I had just written.

My bridge across the Mpanda was a real success. Although I had not seen Part III. of the *Manual of Military Engineering* for over ten years, I had carried it out in practically the same manner as our own War Office laid down for the construction of a double-lock or frame bridge. Needless to say, in accordance with my own practice, my distance-pieces, standards, and heavy timbers were all magnolia, and the decking was of split bamboos. The bridge looked really impressive

as I stood on the edge of the bank, 18 feet below, and I felt well satisfied with my ten days' work. It remained only to test the bridge with a rolling load. Kanionina, the chief, brought most of his people, men, women, and children, and I distributed them over the bridge, leaving in the centre the roadway clear. I then fell in my working party, which was thirty strong. I added to their numbers fourteen carriers who were passing through. I marched these forty-four natives two and two across the bridge. I had then tested the bridge with a rolling load of three tons and stationary load of over five tons. If Nicholls had wanted any bridging done for his traction engines, I was quite game to do it, for I had done this work in ten days with no materials, except those on the ground, a little round iron, aided by very inferior tools, and a party of raw untrained natives.

After completing the bridge I returned to Kambove, bridging the spruits across the road as I went. I remember with very considerable satisfaction one little incident that happened as I was trekking about eleven o'clock one morning, I saw a duiker about to go behind an ant-heap—a young mountain was that ant-heap—about 20 yards ahead of me off the path. Without looking back I grabbed my shot-gun from the boy following me and fired. A duiker walked across the road ahead of me. I heard some boy behind say, "Chingala had missed." I turned round and said, "Lies," the natives answered me back (it is perfectly polite), "Lies." I sat down there and then and had every boy up who had

contradicted me and told them to go and look behind the ant-heap. They returned with the duiker I had fired at, shot through the kidneys. That shot had a very good moral effect, and I felt I was fully entitled to my name, Chingala.

That evening was quite a red-letter day of my life. The mail arrived and I had some exceptionally good news from home. My runners brought me a big box of assorted vegetables from the good-hearted Belgian in charge of the Kambove farm. I received a box of stores I had ordered, and in the box was a bottle of Burgundy, a tin of prawns, and a tin of oysters, sent me by a friend. Into the duiker stew, which was already flavoured with onions, bacon, and herbs, I emptied the tin of prawns and the tin of oysters. My dinner on that night was fit for a king. As an *apéritif* I had my two ounces of whisky—three bottles a month only runs a tot a day. The soup was of bush pig, cunningly flavoured with many vegetables. The fish was a nice big cat-fish from the Mpanda River. The stew was perfection,—if I shut my eyes I can almost taste it now, —the leg of duiker, which I had pierced in twenty places with my hunting-knife, had little onions and lumps of bacon embedded in it, and with my roast I had four different kinds of fresh vegetables. A plump young partridge (francolin), followed by macaroni *au gratin*, concluded the repast, which was washed down by a litre of soul-inspiring Chambertin. It may seem strange that although I slept out in the open I never forgot what decent living meant.

I was going down to Kansanshi on business of

the Union Minière just after this. I had to go first to the Star and from there to Kansanshi. Two marches out of Kambove I had a huge carbuncle at the back of my head. It was so bad that I sent a runner back to ask the English doctor to come to me; that was the only time I ever sent for a doctor, although I had occasionally had to go to one before, in Africa. The doctor had a serious case and could not come, so I made a hammock and did my journey that way. It was a great disappointment to me, for I had meant to map the route between Kansanshi and the Star, but being ill I was forced to pay more attention to myself than the geographical features of interest on my journey.

Between the Star and Kambove there is a big kink in the Watershed. As we shall have to take a bit of the Congo when we carry the Rhodesian railways to the south end of Lake Tanganyika, we ought to give the Belgians this bit, which would be roughly a thousand square miles of territory, and in which there are no villages under the British at present. It is at the north of this kink that the Kafue, the Zambezi's largest tributary, takes its rise. I am not certain whether I have the story absolutely correct, but it was the attempt to discover the source of the Kafue that led to the discovery of the great Katanga Copper Belt. The story may be subjected to slight corrections, but it is so near the truth that it will serve for the purposes of history.

George Grey's first expedition was to select a mineral area in North-Western Rhodesia. He took four white men with him, and pushing on

ahead of the Northern Copper Company he found Kansanshi mine, and round it selected his mineral concession. Grey was a keen geographer, and determined that his expedition, in addition to being a commercial success, should be a benefit to geographical science. He found and roughly fixed the position of the source of the Kafue. Near the source of the Kafue, so the story runs, he climbed a mountain. I only know one mountain he could have climbed, and that is over the Congo border, 8 miles north from the source of the Kafue. He looked over the country from the top of this mountain and counted thirty-seven bare hills. The natives with him told him that the hills were "Chifufia" (Copper). Six years before, the Belgians, led by an English engineer officer, had established themselves in Katanga, but they knew nothing of the Copper Belt, for they did not venture far from the post they had established. Grey said nothing of his discovery. He withdrew his expedition and returned to England. It was arranged that the Tanganyika Concessions should open up this part of Katanga on a certain basis for the Comité Spéciale of Katanga, who were bolstering up the original concessionaires. Such is the history of how the present English interests came to be allied with the Belgians in the development of the Highlands of the Southern Congo.

I hammocked the whole way to Kansanshi, and there stayed with Hayden, who had been our surveyor in Katanga and who was now manager of Kansanshi mine. Hayden had literally done wonders. The two 30-ton water-jacket furnaces

had given a lot of trouble at first, but shortly after Hayden's arrival he had solved all the problems and was successfully smelting copper. The month before I came there he had turned out over 80 tons of copper, and the returns came in for the present month while I was his guest. It was with real pleasure I saw the piles of copper ingots neatly stacked round the store. At first the ingots had been left carelessly round the smelters, but a native who had taken his discharge wrapped one of the ingots up in his blanket and started to take it home, when Hayden ran into him. It was this boy who, under a native foreman, had put in a month's work without wages, stacking these ingots so nicely.

That night I wrote home telling a friend that the production of copper for July 1908 was 83 tons, and I added that this was the first real success of the Tanganyika Company. Far into the night of my second day's stay at Kansanshi I talked things over with Hayden, of the mapping of the country, of George Grey, of Hayden's journey to Benguela, and of the Belgians. It was at the end of our conversation on that night, the last night of my stay, that Hayden decided to leave the Tanganyika Company's service. There and then he wrote a telegram, sent for one of the messengers, and ordered him to start with it before daylight next morning to railhead, 250 miles away. I felt really sad that Hayden was going, for he had done much wonderful work in Katanga. His hurried triangulation, which covered an area of country about 30 miles wide, and which was run for over 350 miles, showed an

error, on measuring a check base-line, of *less than* 1 *yard in* 17 *miles*.

All our good men were leaving, or had left already, for we had ceased to be the happy family we were in George Grey's time. There were also a good many happenings both in North-Western Rhodesia and over the Congo border. A traction engine man had to be severely punished by the Government of North-Western Rhodesia for a brutal crime against a native. A Belgian Chef-de-Poste was for some months an outlaw till he gave himself up to justice for having starved a native chief to death in the guardroom of his Post. Looking back now I see that I should not have been so persistent in staying by Katanga, for I am a man of very strong opinions, which I do not hesitate to express when I know I am in the right.

I returned to Kambove by a different route from which I had travelled before. I had now travelled between Kambove and Kansanshi on four different routes—the Belgian road, Grey's road, my own road, and the shortest road which led through some very broken country and which our mail runners travelled by. I did that journey with my cook and two carriers, leaving my things to be brought on by the traction engines, for I wanted all the carriers I had with me to take dynamite to the Star and Kambove. A few days after my return to Kambove the traction engines arrived, and I left my bridging work temporarily to lend a hand. Before that an incident happened which I describe in the next chapter.

CHAPTER XIII

Copper District of Belgian Congo. Road-making

I had barely got started again on my bridging work when I received a summons to go to Kambove. I was to be tried for flogging a Government carrier, committing all sorts of brutalities on him, and tying him up from sunrise to sunset. The judge who issued the summons was a good man, not the brute who had tried to ruin little Milstead. He could have made me go to Lukafu, but he was willing, if I was agreeable, to let the Chef-de-Secteur at Kambove hear the case and to make his award on the Chef-de-Secteur's recommendation.

I got the summons at midday, and immediately sent a runner into Kambove saying that I would present myself with my witnesses at two o'clock on the following afternoon. One of my workers was particularly intelligent, and I was trying to make a carpenter of him. My boys called him "Fundi" (the learned person). I fell in my working party and called Fundi out. I said I did not want any *monparas* (fools) to give evidence, so together we went down the line, discussing each boy's intelligence. We picked out seven suitable boys, all of whom had seen the affair and lent a

hand in carrying out my orders. I told them that they would have the afternoon off and that they were to learn to say their evidence exactly as Fundi taught them. Then, turning to Fundi, I said, "Teach them the truth, and see that each boy has the time correct." I then pointed to the sun's position at eleven o'clock and said that the boy was tied up when the sun was there. Then, moving my hand through between forty and forty-five degrees of arc (two hours and three-quarters), I said the boy was let loose when the sun was there.

At two o'clock, with eight witnesses and the French secretary, the gentleman I once punched, but with whom I was now great friends, I presented myself at the Chef-de-Secteur's house. We sat outside in the veranda, the secretary on one side, myself on the other, and the Chef-de-Secteur in the middle, with a table in front of him on which was some white paper—pieces of colossal size—with LA JUSTICE in letters about 4 inches high on top of each piece. After the charge had been read to me the Chef-de-Secteur asked me if I pleaded guilty or not guilty. "Not guilty," I said. "Will you give evidence?" "No." "You refuse to give evidence?" "Yes." It was written down on the proceedings. Then I called my witnesses one by one. Each boy told exactly the same story, and told it without any hesitation, for Fundi had drilled them well. I could not help laughing at the generous way my witnesses spoke about the time. "The person was seized when the sun was there," pointing to about a quarter to twelve; "he was released when the sun was

there," pointing to about a quarter past. In fact, some boys hardly moved their fingers at all. The Chef-de-Secteur wrote down the time the boy had been tied up at from fifteen minutes to half an hour—a very different story from that told by the prosecution, who made out that the boy had been tied up for twelve hours. My eight witnesses were unanimous in swearing that that boy had not been flogged, and no amount of questioning by the Chef-de-Secteur could shake them. "I shall write to the judge and tell him that you never ought to have been brought here. I do not think you will be troubled any more about it," said the Chef-de-Secteur after an hour's work. That closed the incident, and I did not hear of it again.

I was luckier than the other men who were prosecuted. They had to go to Lukafu, more than 100 miles away, to wait on the convenience of the Belgian judge, who fined them £2 apiece for assault. These three Englishmen—one the doctor, another the compound manager, and the third, his assistant—were men with years of African training. Their action had been deliberate, and in my opinion was fully justified. The Belgian manager of an Anglo-Belgian Trading Company was rabidly anti-English. He had been instructing the natives that they need no longer salute an Englishman, as the Congo belonged to the Belgians, with the result that the natives were getting thoroughly out of hand, and Kambove was becoming a perfect pandemonium. One of the Belgian's servants deliberately barged into a white man in the stores, and was very impertinent

when remonstrated with. The three Englishmen, all holding responsible positions, knowingly and openly took action to enforce discipline and to compel respect for our own race from the natives. The Belgians felt bitterly the accusations levied against them by those engaged in the game of atrocity-mongering in England, and were only too glad to get cases, however trivial, against Englishmen as some sort of answer to their traducers.

A few days later every native in and around Kambove was knocked off work and put under the orders of the Belgian surveyor and myself. Our traction engine road terminated about 7 miles out of Kambove, and in consequence we could not get the engines in. We were going to off-load the goods brought up by the engines there and rush them into Kambove; also we were going to send back to Kansanshi a large supply of native foods and salt. It was a Saturday afternoon. I got out to the end of the road—the 7-mile water where I had my first camp when I cut the bicycle path which was now the traction engine road. The engine—only one had come up, for the other two had stayed behind in Kansanshi—had just arrived, having come 25 miles that day, trailing 20 tons behind it. I at once off-loaded the trailer and stacked the goods in orderly piles to be ready to send them off to Kambove at daylight.

To me the arrival of a traction engine—*isi-dukaduk*, as the natives called it on account of the noise it made—was a great event. It was history. Less than seven years before Kambove, which was not on the map, was 900 miles from the nearest railway. To whom must credit be given? To

the financiers who found the money, to the men of the advance, to John Fowler & Sons of Leeds, and lastly, but by no means least, to Nicholls, the traction engine leader. If I told the stories I have heard of the troubles with sand, with swamps, and with rivers, it would give the reader some idea of our persistence and effort by which we had conquered. Perhaps the boldest thing Nicholls did was to take the engines through the Kafue. He found a good drift where the river was a mile and a half wide and only a few inches deep; but for 100 yards there was 8 feet of water. The engines were halted at the edge of the deep water. Safety valves were tied down. Steam was got up to over 200 lbs. pressure. Fires were raked out. Then Nicholls, standing above the cab of each engine in turn, boldly drove them one by one through the deep water to the other side. Trailers were then pulled across, and finally the loads were rafted over. In two months, in spite of every obstacle, they had made the journey of 500 miles by the roundabout route they followed between railhead and our headquarters.

Some idea of the effort can be given by what I saw that night. Nicholls could not get his engine down to water where we were camped. There was water 5 miles back. It was half-past seven at night. Leading the way with lighted torches, made of cotton waste and oil, Nicholls made his driver take the engine back. It was eleven at night before they returned, trailing a full water tank behind them. Next day I asked the driver how he liked the trip. He told me that they started work at six and seldom finished before

midnight, adding, "It would have been all right but for the man," and he pointed to Nicholls. I asked the same question of Nicholls. He said, "It would have been all right but for the drivers. I would willingly have paid them fifty pounds a month if they would only have worked." I have since talked the matter over with Fowler's people, who make these wonderful engines, so strong that they could withstand almost any usage. They said, "You Tanganyika people did not use our men rightly. You worked them far too hard." Possibly they were right, but their drivers had good pay, good living, and no discomforts, while we on the advance had little or no pay, poor living, and a very rough time of it, yet we did not complain.

On Sunday afternoon the engine left. Douglas and I rode on the trailer for about 4 miles and then had a sharp walk back, I going to my camp and Douglas afterwards walking on another 7 miles into Kambove after dark. Nicholls did well with his engine in getting down to Kansanshi, for he only slept two nights on the road, doing the 120 miles in fifty-two hours, out of which thirty were actual travelling. Poor Nicholls! That was the last time I was destined to see him. A year later, thoroughly done with overwork, he was forced to throw up everything and go home to New Zealand. Five days after leaving Cape Town he had sufficiently recovered to take part in a dance on board ship. The exertion was too much for him. Clutching his partner in a sudden convulsion he brought her down with him crash on the deck, falling lifeless himself from heart failure.

After getting the stores into Kambove I returned to my bridging, a matter of three days' work. Then I went out to join the Belgian surveyor and help him to put on the boundaries of the Copper and Tin Belts. On my way out I talked to the boys and asked them what they thought of the traction engine. The natives had not regarded the *isidukaduk* with very great surprise. What the white man does, seldom astonishes the native, because his mind is like a child's. Things which they can partially understand do astonish them. Engines (*sidukaduk* or *injinjan*) and bicycles, which they called *jinga*, they cannot grasp. Boots they can grasp, and these take their fancy very much. I remember, when one of our prospectors was bicycling in the Pande valley near Kapiri, hearing village maidens, who had hardly seen a white man before, calling to each other as the cyclist passed, "Oh, look at the beautiful thing in *boots*." They made no remarks about the bicycle.

To join Poli-poli, as the natives called the Belgian surveyor, I went out of my way as I wanted to see how my bridge was over the Mpanda River. I was really pleased with it; so were the natives, who were using it as a camping-ground. That bridge did me a lot of good, for some of the office and executive staff whom I did not like had sneered about my abilities. Now it was the other way round. I was approached by three men who wanted to take up farms, for the growing of mealies offered a very good chance of making money—native foods then costing fourpence a pound in the local centres. From them I had offers

to survey farms at the rates ruling in Southern Rhodesia. That would have meant less than a month's work, for which I would have received roughly £180 cash, and my out-of-pocket expenses for my own living and for native workers would not have been much more than £30. I could have made my work very valuable because I could have connected it with our triangulation. None of the men, however, would agree to pay me for the work unless I received official recognition from the Representative of the Comité Spécial. I wrote to Commandant Tonneau for this recognition, pointing out that over eight years ago I had come out second in surveying and the preparation of plans for Parliament, also that I had learned sufficient from my own society—the Royal Geographical—and from others of astronomical work. Tonneau's answer was a great disappointment to me. He pointed out that when survey work was wanted the Comité Spécial would send out its own men from Belgium. I was now beginning to be thoroughly disgusted with the monopoly system, because a man with intelligence and initiative had no chance whatever. All that was offered to him was work at "under wages," with very incompetent men over him. Had the Comité Spécial started a sound land policy, and given me what I asked, I could have easily made myself the surveyor of the country.

On my way to join Poli-poli, I travelled along the left bank of the Lufira. Most of the country was an open plain, with patches of thornbush here and there. The soil was rich alluvial land, but was sour, owing to the want of surface drainage.

Making a rough guess, I should say that there were well over 500,000 acres of this rich, flat land. I had given special study to farming areas, and I saw that these flats which I have named on my map, the Lufira Flats and the Kisungu Flats, were the most suitable place for a farming scheme in which oil-driven tractors and other oil-driven machinery would necessarily be employed on account of the tsetse fly. For a large native farming area, I always considered the valley of the Nkando River, south of Chilongo, to be best, and there, I think, we should have settled the natives from possible sleeping-sickness areas. For cattle, on a large scale, of course, there was no place like the high country of the Congo-Zambezi Watershed, west of Ruwe, and stretching to within 200 miles of the coast and our port of Lobito Bay.

I had good shooting on that trip, partridges, puku, and reedbuck. Poli-poli I overtook on the second day. The third day we did 24 miles, and made the Belgian rest-house, just below where the Koni Hill Mission stands. I had a lot of trouble that night. My loads had not come in. That did not surprise me, because I had shot half a dozen buck as I went along, and had left them for my carriers to bring on. It was getting on for nine o'clock when a small boy brought a message from Charikosa that some of the carriers had refused to carry the meat, and had been firing arrows at him. Charikosa asked me to send back my shot-gun. That would not do, but I thought I ought to go back myself. Poli-poli persuaded me not to do so. All night

I could not sleep, fearing that my servant would be killed. I felt that if Charikosa lost his life I should have his death on my conscience for all time. Towards ten the next morning, Charikosa's small boy came up with a message, asking me to disarm the whole lot of boys with whom he had stayed out all night. I fell in our carriers and told them what I was going to do. Directly the boys who had been with Charikosa arrived, I had every bow, arrow, and spear off them.

That gang of boys had splendid physique. They were armed to the teeth, each boy carrying a bow and arrows, two spears, and an axe. They came from the high plateau country between Lakes Tanganyika and Moero, and we knew them as Tanganyika-Moero boys. They were really good men, very independent, for they had come little into contact with the white man. I remembered that two years before, a prospector, named Pirrie, had recruited three hundred of them. Pirrie, who knew what he was saying, spoke of them as the most moral natives in Africa, saying that they were strictly monogamous, and both men and women honourable and virtuous. These three hundred boys unfortunately ran away without their wages, because they were badly treated by one of the office staff in Kambove. I determined that these natives should have no complaint against the white men, nor should they be able to give me a bad name. Poli-poli strongly urged me to send them to Lukafu, and have them put in prison. What I did was to return all the bows, arrows, and spears, and tell them that they were my people, and that I was

proud of them, for I always like my people to be well armed, but that they must always obey my orders of my "mouth," Charikosa. I had no trouble at all with them after that.

Koni Hill Mission, at the foot of which we were camped, consisted of half a dozen brick buildings on the top of a spur, a mile from the left bank of the Lufira. It commanded a splendid view. To the south, some 4 miles away, could be seen the Madiengusa Falls, where the Lufira jumped over an escarpment close on 200 feet high into a wide and placid stream, when the river widened out from the gorge below. These falls had already been surveyed by the Belgian water survey party, whom I had met going home on my way up. Poli-poli and I visited the falls, and enjoyed a close view from a natural gallery in the face of the cliff on the edge of the gorge.

Our visit to the Mission was more or less on business, as I had been charged to make arrangements with the missionaries to take daily observations of the rise and the fall of the river where our road crossed it. In all there were five white men and two white women, but, unfortunately, they were none of the old hands who had passed through such stirring times. When the missionaries first arrived—sometime in the eighties—they were imprisoned by Msidi, the paramount chief. They were there long before the arrival of Stairs, the British Engineer officer, who annexed Katanga for the King of the Belgians. They were present at the interview which Sharpe, the elephant hunter (later on Governor of Nyassaland, and now Sir Alfred Sharpe), had with Msidi—the

interview that led the Belgians to send out the Stairs expedition. Sharpe had prepared a treaty by which Msidi, who had already refused the Belgian and Portuguese flags, placed his kingdom under British suzerainty. Msidi dallied with Sharpe, who finally went east, leaving the treaty with the missionaries.

Sharpe had barely left when news was brought of the approach of the Belgian expedition, commanded by Stairs. Hurriedly, Msidi sent for the treaty, giving the English his territories, and signed it, the missionaries witnessing the King's signature. Msidi sent it by runners to Sharpe. The runners, bearing the treaty, encountered Stairs. Stairs stole the treaty and destroyed it. Then Stairs sent to Msidi this message—a lying message—for Stairs was in the Belgian service: "Tell Msidi he has sent a letter to an Englishman, and that an Englishman is coming to see him."

Half starving, the expedition reached Msidi's kraal. Both Stairs and his people were hospitably received by the King. Msidi, however, refused to accept the Belgian flag. Stairs had come in peace. It was on the understanding that it was peace, not war, that Msidi had consented to receive him, for Msidi could have easily wiped out the armed rabble of Zanzibar street-corner boys that accompanied Stairs. The negotiations between Msidi and Stairs were fruitless. Finally, the Belgian officer, Boddson, with the connivance of Stairs, and with no declaration of war, took some of their armed Zanzibaris and went to Msidi's palace—if a series of large mud-huts, surrounded

by a palisade of stakes, may be so called—with a view of seizing him, and bringing him over to Stairs' camp. Once in Stairs' camp, they intended to force Msidi to sign the Belgian treaty.

The story of what then happened is told by the courtiers and by M'hanga, Msidi's favourite wife. Boddson, the Bulamatadi, forced his way into the stockade that surrounded the courtyard of Msidi's palace. Many people, armed with guns, came with him. Msidi was alone, except for a few wives and courtiers. Boddson ordered Msidi to arise and to return with him. Msidi refused. Boddson whipped out a revolver and walked over to Msidi, who was sitting down. Msidi made no move until Boddson put the revolver close to his ear. Then, in self-defence, he put his hand on the dagger on his belt. Before Msidi could draw his dagger, Boddson fired, and blew Msidi's brains out. The only courtier who had a gun shot Boddson before his escort could act. Then the rest of Boddson's soldiers rushed in and started killing. Then came the other white men with more soldiers and killed more people.

Such is the story of treachery and murder with which began the European rule in the Southern Congo.

The missionaries entertained Poli-poli and myself quite royally, for they gave us fresh milk from their goats and splendid vegetables from their garden, which was in the Luivi valley on the north side of the spur. They gladly agreed to go down to the Lufira each day and read and record the height of water on a staff which I was going to place there. They let me use their

carpenter's shop to prepare my staff, which I made 4 metres long, and divided into strips of 10 centimetres, with the paints I had brought with me from Kambove. While I was doing this work, Poli-poli bicycled over to Lukafu, the headquarters of the Belgian local government. Poli-poli enjoyed himself immensely, and came back three days later with glowing accounts of the place, and with bottles of excellent Burgundy. The tame lion, the pet of the Belgian mess, which sighed and grunted, was quite one of the characters of Lukafu, and was so friendly that it was not above helping itself to a visitor's plate of bacon and eggs as he sat at breakfast.

As soon as we had fixed the staff in the river, we started down to find the source of the stream, some 40 miles away, from which we had to run an east and west boundary line. The first evening of our trek we camped at Mwansia's village. A mile to the north-west of Mwansia's were very extensive salt marshes. They are shown on one of Livingstone's earliest maps. From native sources Livingstone was able to show their position with fair correctness, but greatly exaggerated their area. I visited them to get a couple of bags of salt for my boys. Such of the marshes as I could see were roughly 3000 acres in area, and in places, where the water had dried up—for it was now towards the end of the dry season—the salt was knee-deep. The effect was like a big snowfall, for the country was glistening white, and in the chill that always comes with the setting sun in those high altitudes I could almost imagine myself in the northern

interior of British Columbia. By the side of the marshes some twenty Belgian native soldiers under a black sergeant were camped and had sentries posted to prevent the neighbouring villagers from taking salt. Personally I have no objection to Europeans securing resources in Africa, provided that they exploit those resources. Under Msidi's rule there was a great trade with North-Eastern Rhodesia in salt, which the Belgians promptly proceeded to destroy. They annexed the salt marshes, giving Mwansia, who did not own them, two trusses of calico—that is, £5 in cash or the equivalent of £15 in Central Africa. This was not a *bona fide* purchase, especially when the Belgians followed up the purchase by levying a labour tax on Mwansia's people equivalent to over £80 a year. The conduct of the Belgians with regard to the salt marshes was nothing else than disgraceful, for at Kansanshi mine (130 miles away), where we had some six hundred natives in permanent employ and thousands of others passing through, we had to pay 7d. a pound for salt.

After leaving Mwansia we spent two days in travelling to our work. The journey was an interesting one, but rather trying to me as I had to take so many precautions owing to the amount of lions' spoor at each drinkable water-hole on the path. On our way we ran into a stream of nearly boiling water saturated with iron salts, so hot that our carriers cut down a tree to cross it by. We also crossed a stream bringing up salt. This made the fifth hot stream I had seen in Katanga.

These hot streams showed that the great

masses of granite (which had been evidently intruded after the deposition of the most recent formation, the horizontal sandstone) had not cooled down below, and further pointed to the great plutonic activity in the past. As likely as not the Copper Belt was formed by hot streams saturated with copper salts (probably sulphate of copper) forcing their way up through the sedimentary formation from the heated mass of igneous rocks below. The copper mines are all situated where earth-thrusts have taken place and where the strata in consequence is very much contorted. Along these lines of least resistance the hot copper streams came up, impregnating the sandstone and other country rock with sulphate of copper. Gradually these rocks weathered down, and by the action of the air and rain water the copper sulphate was changed into carbonate of copper, which soaked down to about 300 feet, thus making the top surface of the siliceous copper-bearing mines very rich. If my surmises are correct, all the copper mines in Katanga—for there is not a single true fissure-vein in the Copper Belt—will be found almost worthless after the 300-foot level is reached. I hope I have conclusively proved to my reader that the only way to work the mines was by improving on the native methods, that is, by picking out the plums and scrapping the mines as soon as the ore gets too poor to work. We did not want mining engineers at all. Common sense, ordinary intelligence, and common honesty would have been far better.

While Poli-poli and I were working I learned that a friend of mine named Channels, who had

been a mine manager down south, had joined the Tanganyika Company as one of their prospectors. He was then prospecting in and around the granite country of the great Kundelungu Plateau below which Lukafu was situated. This plateau was a great island-plateau similar in many respects to the more broken chain of the island-plateaus (north to the Copper Belt) which I liked so much when I was road-making near Kapiri. I should have been very glad to meet my friend Channels again, for I knew that he would be glad to see me. I had won his good opinion years before, when as a police trooper, more by quick action than intelligence, I nabbed, at the expense of a 76-mile ride and a night without sleep, the seven Zambezis (Mashukulumbwes) who brutally murdered the post-boy of the Theta mine of which Channels was then manager. I renewed my acquaintance by sending him a letter carried by Charikosa, my capitao ; for I wanted real news beyond what I could expect in a written answer. It was about 60 miles across country from my camp to Channels'. Charikosa was away nearly a week before I got my answer. Channels was looking for diamonds and was, I believe, finding a few small ones.

Possibly I am surprising my readers very much in telling them of our discoveries. I am doing so to show that it was the wonders of Katanga that kept me there, though my better judgment told me to resign, and my friends assured me that in this monopolist district I should be given no chance. I have already described the copper, tin, iron, salt—all of which any

thinking man could not fail to see were good. Although diamonds had been found in different localities separated from each other by many hundreds of miles, from the first I discounted any future from them. The same thing occurred in the Straits Settlements, diamonds being found in many places in country geologically similar to ours, yet no discovery of importance was made. Many were sanguine about diamonds; few thought that coal of value would be found. Here I am at complete variance with the opinion of the so-called mining experts whose intelligence is, I believe, not superior to my own. I am certain that coal and rock oil will be found in quantities in close proximity to the Copper Belt. From my own observations in the field I could indicate where it would be advantageous to bore, but I do not intend to point out these localities in my book.

As to the discovery of gold, I am very hopeful. My opinion does not coincide with the views of many of the prospectors, who described Katanga as a "hungry" country, *i.e.* gold everywhere, but nowhere in payable quantities. The non-discovery of gold, I have always held, has been due to the fact that every prospector worked on pre-conceived ideas. The indications show that gold occurs associated with limonite and hematite; therefore the Iron Hills between Musofi and Ruwe should be thoroughly searched.

I had a discussion with Poli-poli about the definition of the "source" of a river. In defining the boundaries the word had been used frequently. Poli-poli held that the source of a river was the point—not a geodetic point, of course—where

permanent water or moisture was found in the principal ravine that formed the river's head. I could not agree with Poli-poli's view. If his definition was accepted it would mean that a "source" varied possibly by many hundred miles according to the season, dry or rainy. I hold that the source of a river is the point where the principal tributary forming its head breaks down from the watershed. In limestone country I take the source of a river—for rivers in such country often flow underground—as the point where the river emerges in a continuous stream, and I reckon the upper waters to be a different river altogether.

I wanted Poli-poli to connect his survey work with the Tanganyika Company's triangulation, and he jumped at the idea. So I borrowed his bicycle and started off one morning at nine o'clock to cycle through on the native path into Kambove—a distance of 85 miles—and get the data required. I meant to go through in one day, but Poli-poli's byke, a wretched cheap Belgian thing, broke down before I had gone much over 10 miles. I burnt a patch of grass on the side of the path and put the bicycle in the centre of it. Then I unhitched my shot-gun, without which I never travel, and started to walk into Kambove. We had a rest-house where the Star-Kambove road crossed the Lufira, and I determined to make it that night. The last 11 miles came very hard. I was very tired and hungry. The tsetse, which are not supposed to bite in the dark, took full advantage of the moonlight and bit like demons. It was nearly eleven when I reached our

rest-house. I was ravenous, for I had walked 45 miles without a bite of food. The capitao in charge had no food whatever for white men. Luckily I learned from him that my friend Eric Douglas had passed that afternoon and was camped about 5 miles on. I roused a couple of boys who were working at the rest-house, and told them to fetch their spears, and then promised them rewards—a yard and a half of calico each—for running to Douglas with a letter in which I asked for bread, meat, tea, and sugar. Borrowing a new blanket from the capitao, I threw myself on the ground and was asleep in two minutes. Towards two o'clock the capitao woke me up and set before me a delicious hot meal. Douglas in his letter to me wrote, " You are the enigma of the whole Concession."

I did the 30 miles into Kambove the next day, arriving there just before sunset. On my way I passed four " stiffs," poor devils of white men, who were living on native foods, and wandering round inadequately equipped in search of work. I spent two days in Kambove, for I had one or two business matters to attend to. Although Poli-poli was a good chap and a Belgian gentleman, I was getting tired of being a subordinate, and having to dry-nurse a man of scientific attainments. I therefore arranged with Demunk, the acting Belgian manager, to let me get back to my road-work as soon as Poli-poli could spare me.

A day and a half's march out of Kambove I met all Poli-poli's boys on their way to Kambove to complain about ill-treatment. A two-minutes' conversation showed me that their grievances

were apparently too little food and too little work. I could have turned them and made them come back with me, but I thought it would be a good thing to let them complain, for Poli-poli was notoriously kind to natives, and the literal translation of his native name was "Easy-going" (softly, softly). When I got back to Poli-poli's camp, I found my boys had stayed with him all right, and that he had not been inconvenienced. Charikosa told me that Poli-poli's capitao had been stealing the boys' food and issuing them short rations. Poli-poli's boys soon came back, and they were a little bit more in hand, for they had been severely talked to in Kambove.

This little incident led to the Belgian surveyor and myself dispassionately reviewing during the evenings all we knew of the Congo atrocities. Poli-poli had been a junior engineer some fifteen years before on the first railway constructed in the lower Congo, that which connected Matadi, its seaport, with Boma, its capital. The terrors of the transport route, before the railway was constructed, were too awful for words. That route for human pack animals has been described as "un sentier sinistre jalonné de cadavres" (staked out with corpses). The deaths on that road were even surpassed in numbers by the awful loss of life amongst the labourers constructing the railway. According to Poli-poli, the natives just died "et on ne pouvait rien faire." An Englishman would have found some way out. I know that I would have, for I have managed in ten years' African experience to get through without a single death from disease, and in both peace and

war the only deaths in my camp have been three from violence—the story of one of these deaths I tell later on. To Poli-poli's credit I must say that he had no part in the stealing of the £40,000 that was due to the 5000 and odd workers that were killed by Belgian incompetence in the construction of that railway of less than 100 miles long.

It was this appropriating by Belgian financiers and their servants of this £40,000, much of it due to British subjects, that led to the campaign against the Congo. Personally I had nothing to do with Congo atrocity-mongering, because I held that it was not fair to attack individual Belgians, most of whom, though honourable and upright men, were utterly unfitted either to colonise or to administer. Had we tried to build up our Indian Empire by employing lance-corporals, ex-bus conductors, and failures in every walk of life, we should never have become what we are to-day, a world-wide power. We built our empire with our best material, using men who had a natural taste for adventure, men who had inherited in part the training and traditions of our Viking forebears, and who were prepared to take chances in their quest of a better fortune than England offered. Many a Belgian is of my way of thinking. Many are the really good upright Belgians who, serving in the Congo, have broken through their rotten red tape in their desire to do good. The crime of the Congo has been caused by rapacious financiers who, under the shelter of Belgium's neutrality, flouted every principle of justice, and built up in defiance of British rights and international treaties the most iniquitous monopoly of modern times.

CHAPTER XIV

I LEAVE THE COMPANY

I STAYED in the Star one night before going to Kambove to get my bridging outfit together. As little Billen, with whom I usually stopped, was away, I went and occupied a room in the new rest-house. I had hardly fixed myself up, when Harrison, the local manager, sent me a note, asking me to turn out, as he had a very important guest coming. The guest, who arrived an hour or so later, was one of the foreign staff of the *Times*, and a son of the house, a man who was an experienced traveller, and, moreover, thoroughly fitted to judge of conditions in Katanga, as he had been shooting big game in the adjoining territory in North-Western Rhodesia. I made Ralph Walter's acquaintance that evening, and learned that his expedition was directly the result of my article in the *Times*.

I did not like the way things were going on in the Star. The petty jealousies, underhand conduct, and treachery of some of the leaders were the direct result of the breaking-up of our happy family by replacing more than half of us with Belgians. I made my stay as short as I possibly could, and left at sun-up on the day after my

arrival. It was a dull trek through to Kambove. For 80 miles, nearly three-quarters of my journey, the tsetse were so bad that I had to march in the centre of my carriers. This is a tip worth knowing. However bad the tsetse are, they always stay with the head and tail of a caravan of carriers, or the leaders and the last of a mob of buck. I always keep by me a thick green veil and gloves. These I wear, together with an ordinary coat and long trousers, when bicycling in "fly" country. However, when walking, I like being in my shirt sleeves, and wearing cut-down breeches like a boy scout, and I do not then wear either my veil or gloves. When there are no tsetse about, I always carry my sjambok; but when tsetse are bad, I carry a big bunch of leaves or a fly-swish made from a zebra's tail.

In Kambove I had a real disappointment. I learned that Bertholet was coming back. We had all hoped that when the directors got him at the end of the telegraph wire at Broken Hill they would have the good sense to buy him out—he had a seven years' contract with them—and appoint Demunk, whom we all liked, in his place. There was other bad news as well, this was that the Belgian nation had bought the Congo from their King. I could foresee trouble from further development of national animosities, when the time came to replace the Congo flag with the Belgian tricolour.

I only stayed in Kambove two nights, for I have a way of worrying everybody till I get what I want. In that time I got together, among other things, two condemned mine ropes for hauling big

timbers, some thirty hoes, a dozen or more axes, four picks, four shovels, a cross-cut saw, a hack saw, a heavy hammer, some bar iron, and a sufficiency of calico for purchasing native foods. My first step was to establish myself where our path crossed the Safumwongo River, exactly half-way between the Star and Kambove. Here I built a big grass shelter, beneath it I stored my native foods and the things I did not want. That temporary depôt of mine took me two days to put in order. Then I started for the Star to bridge my way back.

The place where I fixed my headquarters had quite a historic interest. The site was only a few hundred yards from the spot where some forty years before stood an insignificant native village, whose chief was named Katanga, one of the many small smelters of the Walamba and Wasenga nations, who at one time worked the Copper Belt. I have already explained how it happened that his name was given to the district.

After having established myself at the Safumwongo, I trekked down and camped at the nearest water to the Star. It was a very bad road for lions. Every night I would be woken up by hearing a lion roar. At the 8-mile water I was camped less than 50 yards from the river, and two lions came down to drink where I was making my bridge. These beasts kept me awake for hours with their roaring, about 20 yards from my tent. Three or four miles away I could hear the answering call of half a dozen more. When a lion roars he is absolutely harmless, and one has no cause to fear for the boys. The time one fears

is the morning when one sees fresh lion's spoor round one's camp, without having heard the lions at night, for a lion does not make any noise at all when out hunting, except a faint occasional sigh.

When I was bridging the Lukune, 19 miles out, I had to go in on business to the Star. After lunch I started with the intention of spending the night there. I had nothing with me except two boys carrying my rifle and my shot-gun. I soon outdistanced my gun-carriers. Just before sunset I was nearing a little dambo (open glade) through which the path ran. It was about 3 miles from the Star. At the edge of the dambo I halted thunderstruck. I saw quietly grazing the finest bull sable I had ever seen in my life. I promptly sat down. I looked at that bull sable in expectancy and fear. Expectancy—for I reckoned his horns to be worth £150. Fear—lest some one should come from the direction of the Star and scare my prize away. My watch was on my belt, and almost every second I looked at it, wondering when my arms were coming. I had waited ten minutes and had heard no footsteps. Suddenly I felt a tap on my shoulder and one of my boys put my ·303 Martini-Metford carbine into my hand. I loaded it with a soft-nosed bullet from my belt. Without shifting my position I raised my rifle and fired. I got the buck nicely behind the right shoulder, and he dropped without a sound. I rushed and cut off the head (for I always carry a huge great hunting-knife in my belt). Leaving one boy on guard with my shot-gun, for I was going to send out for the meat, I

walked into the Star carrying my rifle and my rifle-carrier carrying the head. I went straight to Billen's hut and told him I had shot the record sable of the world. While I was waiting on the head being carried in, I told Billen of my thoughts when I sat watching that sable, waiting for my rifle. The previous record of sable, just over 51 inches, had been shot by Robinson near Kansanshi mine. He had sold it to the Rhodesian Club at Bulawayo for £75 in cash. I had seen that head. I knew that Julius Jeppe, the Cape Town millionaire, had subsequently bought that head for £125. I felt certain that my sable's head was bigger than that, and my mouth was watering for that £150 for which I knew I could sell it.

The head was brought in. Billen got out his measuring tape. The horns were only 49¾ inches. I was so disappointed that I intended to throw it away. However, some Belgian asked me for it, and I gave it to him.

The only village on the Star-Kambove road, east of the Lufira, was that of a little chief called Muyeye, every other village having been driven away by the depredations of the English and Belgian native capitaos passing through. It has always been our policy to encourage by every means in our power native villages to remain along our transport routes. This could only be done by ensuring that the villagers were not molested by natives who had some authority and whose work kept them passing up and down. I was determined that Muyeye, who had been a good friend both to myself and to my people, should be able to remain where he was, so that I or my

people, if occasion should arise, could make use of his village for shelter or assistance.

I was bridging one of the spruits about two miles from Muyeye's when he came to me and complained. A woman and a man had been shamefully knocked about by two native capitaos from the Star of the Congo mine, and food and honey-beer stolen from them. I do not believe in justice being delayed, so I sent out and had these two capitaos seized. They admitted their offence, and offered compensation. One boy had five shillings on him, and the other had half a crown. I thought the best punishment would be to take the half-crown from the boy who had that sum, and to pay it to the wronged natives, and that it would be as well to make an example of the boy with the five shillings by giving him a dozen lashes. The boy whom I had ordered to be flogged began to talk big, and said I could not flog him—he was Harrison's servant. I did not argue with him, but ordered Charikosa to put him down to give him thirty lashes instead of twelve. It is a very serious thing to flog another man's servant, especially the servant of a man like Harrison, with whom I was thoroughly out, but, still, I feel I did the right thing, for I owed Muyeye both friendship and service.

After this Muyeye episode, which did not do my name any good with the local management, I shifted to my depôt at the Safumwongo. Bertholet was expected up, and to avoid having trouble with him, Demunk and the Englishman in charge of our food-buying asked me to go to turn a white man out of our rest-house at the crossing

of the Lufira. It was only a matter of a 23-mile walk, so I went over there one afternoon, nominally to shoot puku on the Lufira Flats the following morning. I must say, I did not like the work of having to turn this destitute man out. He was a good class man, a skilled mechanic, who had been employed as a foreman riveter on the great bridge over the Zambezi. In quest of fortune he had wandered north, and all his little savings had been spent. All that he had left now, other than the rags he was wearing, was his Lee-Enfield rifle. In a monopolist country he had no chance whatever of making a living. I talked it over with him and pointed out to him that it was no good staying in the Congo. The nearest possibility of work was at Madonna, called after McDonald, who was our labour recruiter in North-Eastern Rhodesia. McDonald had laid down about 400 acres in rubber, and I knew he was employing a lot of natives to keep the ground clean. Madonna was only 170 miles away. So I suggested to the man that he should go there and see if McDonald could give him something to do. In order to do the absolutely right thing, I gave him 40 yards of calico, 25 rounds of ·303 ammunition, and £5 worth of European stores, such as flour, tea, sugar, bacon, etc. Later on our English doctor characterised my conduct as disgraceful. I could not see it, for I carried out my orders and had helped the man at a very great expense to myself.

Some two or three days later, Bertholet came through my camp, bringing with him his wife,

who was the fourth white woman to come to Katanga. I saw when I lunched with him that my days were numbered, and it would not be long before I should be dismissed, for the letter for which I had hoped from the Chairman of the Tanganyika Company, asking that I should be fairly treated, had never arrived. I completed my bridge over the Safumwongo, and then bridged between Muyeye's and my depôt. I had got the last bridge on the Star side of the Safumwongo finished, and all that remained was to deck it. It was there that a letter arrived from Bertholet, telling me to cut a new road from the Safumwongo to the Lufira—I had suggested that to him—avoiding an old native village and heading every spruit, thus saving the necessity of bridging. The letter also told me that my engagement with the Union Minière would terminate in six weeks. Leaving a small working party behind to deck that last bridge, I trekked on and camped at my depôt at the Safumwongo. Charikosa and Fundi stayed behind. Knowing that there were a lot of lions about, I told them they might have my rifle. Foolishly Yavan, my cook, gave them my shot-gun.

I had previously sold my two heavy rifles and bought a light carbine (·303 Martini-Metford). That was the only weapon I had in my own camp that night. My dismissal by Bertholet had caused me to lose heart, and I in consequence did not attend to the little details in my camp. We had only a miserable fire, for natives do not go and fetch big logs after a hard day's work unless their white master makes them. My boys'

camp was about 50 yards from the open grass shelter where I stored my goods and under which I was sleeping. A drizzly rain was falling, and the night was pitch dark. About half-past three in the morning, when the camp fire was burning low, suddenly from the boys' camp—for I am a very light sleeper—I heard a shriek of "God!" I could distinguish one boy saying, "A beast has seized a person." I knew what the word beast meant, for natives do not use the word lion from fear lest ill may befall them. I put my feet into my veldtscoons, slipped cartridges between my fingers and my teeth, seized my loaded rifle, pulled a big wisp from my grass shelter, rushed to the fire, and lit my improvised torch. Yavan flung his arms round me and implored me not to go. I was forced to hit him in the face with the butt end of my rifle to shake myself free. I ran to the boys' msesas and called upon them to come out, get grass torches and their spears, and follow me. Not one boy moved. I expect to be obeyed. With my grass torch I set every msesa on fire, with the boys inside. They bolted out like rabbits with a ferret after them. With twenty boys behind me carrying spears and grass torches, I followed the tortuous trail of the dragged body. Hearing something to my left front, I fired two shots, more with the idea of scaring the lion than killing it. I heard something clear in the bushes. I rushed on and came on a bit of leg, bitten off below the knee. I could see that all my people had lost heart now, and that any further efforts of mine were useless. We made a bee-line for the blazing shelters. Suddenly there

was a "Urrghh"—half a dozen yards from us. Every boy bolted, bar one. His torch was nearly out, but he had another big wisp of hay in the hand that held his spear. He lighted his fresh torch, and, following behind me, we approached the lion. I walked up within three yards of the lion to see whether the victim was dead. The lion had torn the boy's stomach; one of his paws was over the boy's body, and the other paw was behind him. The boy lay with his hand behind his head, and he had been badly bitten round the neck. I saw that the boy was dead for certain, so there was no need for me to fire. I would have fired and risked a charge if the boy had been alive, although I had only a light rifle. With the lion covered all the time, I stepped slowly back till he was beyond the light of my companion's torch, cursing myself the while for my folly in having lent my shot-gun.

The first thing that I did when I got back to my shelter, and I remember it with satisfaction to this day, was to call the boy who had stood by me, go to where I kept my calico, and give him there and then three months' wages. I was glad the native who was taken was not one of my people, and was only one of a gang of carriers passing through who had taken advantage of the shelter of my camp. I cursed myself, too, for not having strychnine with me, for had I had some I would have recovered the boy's body and poisoned it, and killed both those lions.

In the early morning I spoored the lions about 2 miles up the Safumwongo. They had anchored down in a little thicket, below which (*i.e.* lower down

the stream) was a little cliff, about 30 feet above the river. I posted ten boys with spears and stones on the top of this cliff. The rest of the party cut into the thicket, armed with spears and axes. Had I had another white man with me, or even another rifle to give a native, I would have posted him the other side of the river, although I did not anticipate the lions would try to cross it. I kept behind the boys, cutting into the thicket, which was about 40 yards long by 10 deep. The lions broke exactly as I had intended, and ran up the cliff where were the boys with spears and stones. I could hear the shouting but I could not see the lions—they were a lion and a lioness, both young ones. I expected every second that the boys would drive the lions back on me, and that I should probably bag one of them; for I now had Charikosa by my side with my shot-gun. Then a boy ran down from the cliff to tell me the lions had crossed the river. The ground on the far side was much lower. The lion just landed on the edge of the bank. The lioness had blundered in and then scrambled out. I had a tape in the pocket of my coat which a boy was carrying. I took it out and measured the distance. The actual jump was 42 feet, but the take-off was about 20 feet higher than the landing-ground on the far side.

I was determined that those lions should get no more victims, and that there should be some shelter from wild beasts at the Safumwongo crossing. I decided to turn my grass shelter into a "lion-proof." We worked hard all day, and by five o'clock in the evening we had stockaded with

strong poles all round the grass shelter—close on two hundred feet of stockading, with a strong gate of horizontal poles. Before sunset I had all the boys out with armed pickets, protecting the workers gathering firewood. We had a huge fire that night. All my people slept inside the lion-proof—I keeping only the small portion that had formed my store for myself and my servants. I had a guard inside the lion-proof to wake me if they heard anything. I woke up about half-past three, hearing the fowls screeching; my guards were asleep. I must mention here that lions only hunt between five and nine in the evening, and from three to seven in the morning, leaving the five hours of the dead of night for slumber, travelling, and talking (roaring). I listened some time to the noise of the fowls, then, taking my shot-gun, I clambered over the top of the log gate and walked to the fire. I gathered up pieces of loose wood and made the fire blaze up really well. The fowls, which were in a little house made of grass and sticks, about 20 yards away, still continued to shriek. Cautiously I walked up to the fowl-house and listened to the screeching. I concluded a snake was inside, and decided to do nothing, for I was getting chilled with the misty drizzle that followed on the heavy rain that had fallen during the night.

When daylight broke the boys called me, and showed me the footprints of the lions who had made six tours round the lion-proof while we slept. On the far side of the hen-house, on the damp ground, was the impress of the lioness's body. She had put her paw through the hen-house and

killed one of the fowls. She must have been lying there all the while I was standing on the opposite side.

It was a very well bunched-up and highly disciplined lot of boys that came with me into Kambove a few days later, after we had finished the five little bridges between the Safumwongo and the Lufira. The boys gave me a good name, and told their friends that, when the lion was round the second night, Chingala had gone out alone, and had neither asked nor commanded service or assistance from any of his people.

Kambove was a perfect pandemonium when I got there. My boys, after drawing their pay, all got drunk, for there was a crowd of native scoundrels selling native beer and running houses of ill-fame. I did not envy the compound manager his job. Bertholet, under various pretences, managed to deduct some £5 off the very small sum due to me. I did not know what to do, but I thought it would be a good idea to spend the rainy season, which had now begun, in or near Kambove. Round each mine the Belgians had conceded to the Union Minière an area of 5000 hectares, roughly 2,000,000 acres in all, for there were two hundred copper mines. Bertholet told me that if he found me on the area round Kambove, that is, roughly within 2½ miles of the centre beacon of Kambove mine, he would order the soldiers to turn me out.

The Consul was away, and I had no one to whom I could complain and who would take my part. I thought for the moment of buying Kambove, Kakanda, and one or two other mines

from the natives, whose property we had confiscated without any compensation whatever. However, I felt that would be treachery, and, moreover, I doubted if the British Government would help an unknown and almost penniless man—for I had little over £150 in the world, and many debts—in fighting a powerful corporation over titles to mines in Central Africa.

There was nothing else to do but to trek down south. In order to avoid the cost of carriers I sold everything I had, except my bed, blankets, a change of clothes, a few socks, my cooking pots, my rifle, and my shot-gun. I was thus able to march with my two servants, who carried my arms, and four carriers, carrying loads. I took no tent, although the rainy season was now well on. To travel without a tent meant leaving camp at about 5.30 a.m. (half an hour before sunrise), and by marching hard to make the night's outspan by midday, if possible, but anyhow not later than half-past two in the afternoon. I took no tinned meats whatever, and relied on myself to get all the food I wanted on the way down. I knew I could do this, for, although I had been working hard, and had had virtually no time for shooting, I had only eaten three tins of meat in seven months.

There was little Christian charity in Katanga, and the Belgians were not above hitting a man when he was down. Having no tent, and to avoid having to run up shelters in the rain, I tried as far as possible to make white men's places or rest-houses. The first day I made the Belgian rest-house at Kanionina's, 24 miles out. The second day I did a short trek of only 6 miles to the rest-

house at the Lufira crossing. There was a Belgian camped there. His servants, and the native woman he was living with, were occupying the rest-house, which they turned into an absolute pig-sty. After I had had my lunch of fresh steak of puku, a leg of which the Belgian had given me, I spoke to the capitao in charge, and arranged to sleep in the store. I saw the Belgian go across to the capitao and have some conversation with him. A few minutes later the capitao came up to me and said, "This Stonebreaker asked me if you are a thief." I was furious, for I hate anything that lowers European prestige in Africa.

Taking my shot-gun from my servant, I told him to take the leg of puku and return it to the Belgian's cook. He did so. My servant was carrying my money. I told him to take out 2s. and give it to the Belgian. The boy took out the 2s. and handed it to me. I told him to give it to the Belgian. He answered, "I fear." "Why?" I asked. "The Stonebreaker has a revolver in his hand." I walked up to the Belgian's tent, threw open the flap, and there he was sitting on the edge of his bed, shaking all over, and in his right hand a revolver, which, luckily for himself, pointed downwards. I told him not to move, and added that his conduct in trying to damage a European in the eyes of a native was scandalous, and advised him strongly not to do such a thing again. Then I ordered my servant to hand him the 2s. The Belgian begged me not to give it to him, and said that he did not want it. "Throw it at him," I said to my servant. The 2s. piece hit him and rolled on the ground. "Pick it up,"

I ordered. The Belgian made no move. "If you do not pick it up I shall enforce my orders, for I am not going to be indebted to you for my lunch." The Belgian saw that I meant business, and, stooping down, picked up the 2s. piece with his left hand and put it into his pocket. With that I left him.

I have told this story to give the reader some idea of the class of people the Belgian financiers sent out into the Congo.

That night I trekked on 7 miles, the next night I slept in my lion-proof at the Safumwongo, the third night I spent in a hut in Muyeye's village, and the fourth night I had the good fortune to run into Poli-poli, half a day's march out of the Star. I found Poli-poli had improved very much and was getting quite into South African ways. His boys, who used to laugh at him, no longer did so, and they moved quickly to obey his slightest wish. I was most anxious about the future, but he told me things would be all right and that Bertholet would be dismissed before long and that I would come back and do well. Poli-poli had not been able to buy any whisky at the Star as Harrison had reserved it all for his own white workers. Just before dinner, a gang of carriers passed through, carrying cases of whisky. I was really glad to see Poli-poli use common sense and display a little initiative. He sent the whisky carriers out to get firewood, and then opened one of their boxes and took out a bottle. He put an empty bottle in its place with a note inside, saying as he had not been able to draw his three bottles that month, he had helped

himself. He also gave the bearer of the case a note saying that one bottle had been taken out by the surveyor. Poli-poli had thus gone up a lot in my estimation. A couple of months before he would have told me that such a course was *défendu* and would not have dared to do it.

I travelled fairly fast down south. I had one night with little Billen after a 19-mile march, a night in the bush after a 27-mile march, a night with my friends Austen and Fowler, who had started a food-trading station on the traction engine road close to the Congo border, then an easy 4 miles into the new Belgian post of Kinsenda.

After leaving Kinsenda, as I zigzagged along the international boundary, I had more shooting than I could possibly want. Two pans, some days apart, furnished me with a supply of ducks. I shot partridges and guinea-fowl every day. Also I killed a lot of buck which I gave to the improvident villagers and to the hundreds of starving carriers I met on the road. Two and a half days out of Ndola, the District Commissioners' headquarters in the British territory, I was having lunch at the edge of a big vley which the traction engine road skirted. There were a mob of hartebeeste, close on to 2000 strong, grazing some 700 or 800 yards away. A party of 100 carriers halted to cook their midday meal close by me. I heard remarks about "isichevu" (relish) and "Chingala" (myself). Presently a deputation came up, seated themselves on their haunches, and commenced clapping their hands preparatory to making a request. "Would the Lord Chingala kill them some meat? There was no food to

be bought from the villagers *en route* and they were very hungry." I called for my rifle, and put the sight up to 600 yards. I chose a big bull standing on a little ant-heap. A cow standing just below him dropped. The herd ran 100 yards or so, leaving the dead cow and the big bull alone. I put the sight up to 800 yards and took a careful shot from the camp-chair I was sitting in. The bull walked twice round the ant-heap and fell. I gave the meat to the natives, and on my way back to drink a cup of tea after my lunch, I paced the distance, making it 825 yards.

The boys were all singing about Chingala's prowess. Now, I am a bad rifle shot. However, having won some reputation by those two shots —one having cut the vertebrae of the cow's neck and the other having entered the bull's heart— I wanted to see what the natives really thought. So I called up the carriers, whose numbers had been augmented by the arrival of a fresh party, and who were now over 200. I asked for a volunteer to go and stand where the bull hartebeeste had stood and to let me have a shot at him. First I offered 5s. for a shot, gradually I increased my offer till my servant had produced all the money I had with me—£6, 9s. in silver. This I offered to any boy who would stand on the ant-heap 800 yards away and let me have one shot at him. They all looked very keenly on the money, for their wages were only less than 6s. a month. However, no boy would pluck up heart to let me have a try. Personally I would have let any white man try his luck on me at that distance for a £5 note. Of course I did not want

to shoot a boy. What I wanted to do, and what I succeeded in doing, was to make my name good.

The finance for running the railway—the so-called Cape to Cairo—up to the Katanga Copper Belt had now been arranged. Unfortunately the railway would not go *via* Kansanshi to Kambove. English money had been hard to get, but the Belgian money had been ready for a long time. Consequently the railway was going to the Star. It would go the shortest distance in British territory and the longest in Belgian. Half-way between the Congo border and Broken Hill I met "Morseni," one of the railway builder's people, who, with a white assistant, was coming up to look for the route. He entertained me at dinner and advised me to have nothing to do with the railway, as there would be no money in the construction, and also because the contractors would have to give the preference of any good things that were going to their older hands.

However, I made up my mind "to go through with" Katanga, and the railway construction seemed to offer the best chance of getting back.

I had other objects in view, for if I failed to get my share of the development work that would take place, I thought I might get the running of all the work that an International Boundary Commission would have to offer, such as constructing beacons and cutting trails, recruiting and feeding native labourers. I had got in touch with and was friends with the department at home who would have been responsible for carrying

out this work. The necessity for a boundary commission was evident, for the railway was to run just inside the international border. The waste of a lot of money could have been avoided, if certain kinks in the boundary could have been adjusted, thus enabling the railway to follow the most economical route. I had written to the head of a private firm of bankers and arranged to have a question asked in the House of Commons. The question was asked privately, and I did not get the detailed reply, but I gathered that we had not recognised the Belgian annexation of the Congo basin, and that, until we did, the boundary would not be that delimited. Personally I could not see the wisdom of not running the boundary, a work which would have only cost a few thousand pounds, which would have saved endless complications and a great deal of money. I could, however, see the reason of our not recognising the Belgian rule in the Congo ; for the Congo State in the eyes of the diplomatists was not a Belgian colony, but a State ruled by eleven powers, with the King of the Belgians as their foreman.

The distress was very bad in and around Broken Hill, and there were scores of white men worse off than the natives, for they had to live on native foods and could not earn any money. The future seemed to forebode worse things, for there were rumours that the Mashukulumbwe —the turbulent Negro race who lived in the middle of the Bantus of Northern Rhodesia— were about to rise and kill off the white men. The rebellion was frustrated by the aggressiveness and enterprise of a young mining engineer,

who believed in action rather than in talk. He put his camp near Ninga—I knew Ninga, for I passed it on my way up over three years before—in a state of thorough defence, arming and training his workers. Round his house were planted rose bushes. Round each rose bush was a circle of big white stones. The engineer invited the Mashukulumbwe chiefs to visit him in peace. He said that he would talk things over with them. He took them to the rose trees and picked them roses. He said that the white stones did not make the roses grow big as they did in his own country. In his own country, he went on to say, they put human heads round rose trees. Would the chiefs count the stones? The chiefs counted the stones and told him they were four hundred. "That is exactly the number of heads I shall take then when you fight me." The bluff succeeded.

So bad were things in North-Western Rhodesia that the railway track was becoming a mass of weeds. For want of freights expenses had to be cut down. There was only one white ganger to every twenty miles. The train, instead of carrying relief drivers, firemen, and guards, had only one staff. A few miles from the Kafue bridge we drew up and outspanned in the forest for the night. The engine-driver raked out his fire, and we made ourselves as comfortable as the mosquitoes would permit. At daylight next morning the engine fire was lighted, steam was got up, and we resumed our journey south. At Livingstone, which was now the capital of North-Western Rhodesia, I changed into the Zambezi express, and arrived in Bulawayo just before Christmas.

Lonely and knowing no one, I ate my Christmas dinner in solitary state in the Palace Hotel. It was the dullest Christmas I have ever spent, and the only thing that buoyed me up was the hope that the future would have better things in store.

CHAPTER XV

Waiting on the Railway

I could not afford to live in Bulawayo without work while I was waiting on the railway going north, for I had sent every available penny home to England to back "Tanks" (the shares of the Tanganyika Concessions) for the rise which I knew must take place soon after the railway started building.

I therefore hustled round to find something to do. The first man I met was Hepker, the big butcher and cattle owner. I had known him when I was in the Police, and although there had been friction between us we had always kept friends. Hepker told me he had 1450 head of cattle on the Gwai River in Southern Rhodesia, and the Dutchman he had in charge was going away. He suggested that looking after his cattle would suit me till I got something better. So, having put everything in motion to try and secure a sub-contract with the railway builders, I took the train north to the Gwai siding, which is about one-third of the distance on the line to the Victoria Falls.

In the six weeks that I spent with those cattle there were in all six other white men who were, like myself, either sitting down or trekking down south with cattle purchased from the natives of

Barotsiland, north of the Zambezi. From the first I laid myself out to have my cattle in the best condition of any of the cattle there. I made fresh lion-proof kraals and had the cattle out grazing before daylight, bringing them in before dark, when I counted each of my four herds. I sent for salt, which I used to have sprinkled on the cattle as they stood drinking in the Gwai River. The cattle were very poor when I took them over. The grazing was not good on the north side of the Gwai. So after a little while I daily swam or forded the river with my herds. And in the rich marshes to the south they put on fat very quickly. In less than a month my cattle were in the best condition of all the cattle round.

But the work was monotonous, and the life was very lonely. My only distractions were a bi-weekly visit to meet the Zambezi express and hear the news of the north and south. Sometimes in the evening I would walk down the track, cross the big bridge over the Gwai in the dark, and spend an hour or so chatting with a friendly ganger, getting back to my camp before midnight. I made friends with a Zulu who had settled down in the neighbourhood of the railway siding. He was immeasurably superior to any of the natives around, and one of the few people that I was able to talk to. My Zulu friend had travelled far afield, and in the early days of the railway building his work had led him to Beira, Rhodesia's port of entry on the east coast. There he had seen the sea for the first time. When he got home he found that during his absence his wife had given birth to a daughter. He called the girl Luandhle (or

the Sea). Luandhlé was now some twelve years of age, a dainty Zulu maiden with big, round eyes, a soft voice, and a most disdainful laugh. Sometimes her mother would send her over to me with a pot of beer of her own brewing. Luandhle would sit outside my tent in the heat of the day, sometimes playing at cooking, sometimes cleaning plates, sewing on buttons or mending my clothes, for I always made her work while I told her stories, in childlike language, of my travels far and wide—stories that I think she thought were fairy-tales. When I dismissed her to go home I generally gave her a piece of meat, some salt, or tobacco to carry to her father.

Sometimes I went shooting, going out towards four o'clock in the afternoon, always trying to get back at dusk to guard my cattle. On one of my shooting expeditions I failed to make my camp, so I lay down to sleep on the veldt. At breaking dawn I woke up. From over the low bushes and scrub at my back I saw three heads with long necks peering at me. I had not been drinking. I had done nothing in my life to make me dread death. But what were these heads? A foretaste of the infernal regions? Was my brain distorted? I rubbed my sleepy eyes and got up. Three giraffes bounded off into the grey dawn.

All the time I was at the Gwai I was waiting to hear definite news of the railway starting, for I thought I could do something better than look after butcher's cattle. Had I had money I would have gone up myself to Barotsiland, bought cattle from the natives, trekked down south with them myself, and in a year or two made my

fortune. I had just received news that the railway builder was on his way up. I therefore arranged to leave my employer directly after the big cattle sale had taken place, to which buyers were coming from all parts of Southern Rhodesia.

The day of the sale I had one of my real successes of my life. The other men thought that their old dirty cattle kraals were good enough, and to avoid trouble, they did not turn their cattle out to graze in the morning. Moreover, they had heifers, cows, and bullocks all mixed up together. I had shifted my ground. I had built temporary kraals of fresh green boughs. I had my cattle out before daylight grazing on the Gwai marshes. I had my herd divided into classes—heifers, cows with calves, cows without calves, and beef animals. Before I drove the cattle to my sale-kraals, I made them stand up to their bellies in the Gwai River and had salt sprinkled over them. They came in leisurely and tame. Every head of mine sold—and sold splendidly—while none of the other cattlemen sold a single head. The manager of a Rhodesian mine, who was at the sale, said I was the only man there who knew how to look after cattle. He was really pleased with the sixty-four heifers he got from me for his company's farm. I went and lunched with him on the special train that was waiting to take the buyers back.

The mine manager and I got talking. I told him all I knew about Katanga. I said that I was carrying "Tanks" for the rise that was bound to take place when the public at home realised

that the Katanga Copper Belt would be connected with the Rhodesian Railway system. He told me that "Tanks" were a heavy stock to carry. We then discussed his mine. I had once been in the native department, and for a little while had had a temporary office on the surface of my friend's mine. I could not believe what the mine manager told me. It seemed too marvellous to be true. He suggested I should come up to see for myself. "If it is as you say," I asked, "why don't your shares go up?" "A big shareholder has recently died, and his executors are realising his holdings." "How long has London had the news?" "About three weeks."

I did not act. Not because I doubted my friend, but because I thought "Tanks" would move first. Three weeks later my friend's statement was substantiated. The shares of his mine rose 1300 per cent. Working on a margin with the £75 with which I was backing "Tanks," I could, if I had acted, have cleared £4000 in those three weeks. That is one of the many missed chances caused by my having Katanga on the brain.

I now narrate an incident that occurred at the Gwai to illustrate the value of permanganate of potash if applied quickly in cases of snake-bite. To this end every man in snake-infested country should always carry permanganate of potash on his person. I am not out to advertise any firm, but I mention that Burroughes & Wellcome, the big London chemists, make a very convenient case holding permanganate of potash and a lancet. They are of boxwood and will fit into a belt made

to hold ·303 Metford cartridges. They cost 1s. each. In Katanga it was my practice to carry three of these little boxwood cases. I had little metal bands, with a ring attached, put on to them. One I used to carry on a thin chain round my neck, and that one was always on me. I had another on my whistle cord, and the third on my belt, with my ammunition. I also had them carried by my personal servants, by my capitao, and by my shooting boy.

One evening at the Gwai, just after sunset, I was having my bath, or rather, washing all over, from a bucket of hot water, when I heard a shout that a snake had bitten one of my herders. I had handy a large bottle of the crystals of permanganate. Snatching it up, together with my razor, I rushed, naked as I was, to the boys' camp, counting quickly all the while. A black mamba had bitten a boy on the big toe of his left foot. With my razor I made four slashes to the bone, and again four slashes crossways. I poured some crystals of permanganate on the wound, and rubbed them in. I picked two or three leaves, and held them over the toe. I then snatched a boy's loin-cloth off, tore a bandage from it, and bound the leaves over the wound. I had counted four hundred by the time I had finished.

The next thing was to get ligatures. I had a few reims (ropes made of raw hide). I sent for a reim, cut it in two, and put two ligatures round the boy's thigh, twisting each tight with bits of stick, which I lashed firmly into place. The boy told me he was going to die. I laughed at him, and, telling him that I should whip him

for being careless, went back to get some clothes on.

Twice during the night I visited the boy. He had high fever, but his pulse was strong. He was despondent, and still determined to die. I thought it would be best to give him something else to think about, so I cut a stick, slit it down, and picked a live ember out of the fire. I then inflicted a severe burn in the boy's right arm and went back to bed.

I saw the boy again after my midday meal. He was laughing, and said he was not going to die. I felt his foot, and found it icy cold. I saw that I had to take the ligature off. For the life of me, I could not remember whether the lower or the upper ligature should be loosened first. It was not worth while worrying about, so I cut both reims at once. The boy started examining his toe with great interest. Suddenly he bounded up and went through the weirdest antics for nearly ten minutes, yelling all the time. I knew this was only a violent attack of pins and needles, due to the blood rushing suddenly to the foot. I told the other herders, who were looking on, that the medicine I put into the boy's foot had got into his body, and that he would be soon all right.

I have heard many stories from other men of life being saved by permanganate of potash; for instance, that George Grey saved life in Katanga, and that two other friends of mine did the same elsewhere.

After the cattle sale, I left by the goods train that passed through that night, arriving in Bulawayo in the morning. I had barely got my kit

out of the train, when I saw the Zambezi express steam in from the south with the railway builder's private coach attached. Round the Grand Hotel in Bulawayo were hundreds of white men waiting to see the railway builder, all hoping to sell him something, or get work with the construction going north.

I had hardly got back to my old quarters in the Palace Hotel when I received a message from the manager of one of the Bulawayo banks. I promptly went round and saw him. The manager told me he had been instructed to get a good man to run a shooting trip round Lake Bangweolo for four rich sportsmen who were coming up. I saw money in this, but I wanted work that would serve for the future, and, perhaps unwisely, turned the offer down, suggesting, however, a suitable man in my own place. I saw that things would be moving north, so I decided to go up at once. Before leaving Bulawayo I arranged with the editor of the *Bulawayo Chronicle* to be his correspondent in North-Western Rhodesia and the Congo, for I felt that the news that I would send down could not but be productive of good.

Seventy-two hours after my arrival in Bulawayo—I could not get away before—in the guard's van of the first goods train I went north.

The Falls were at their best when we crossed the bridge, for the rainy season, which was just finishing, had been a particularly heavy one. At Livingstone I spent a couple of days, as I had to wait for a train going north. During that time

I visited Moore, who was proprietor and editor of the only paper in North-Western Rhodesia, and arranged to be his correspondent at Railhead. I also saw my friend, Otto Beringer, who was the chief surveyor of North-Western Rhodesia. And I called on the administrator, Mr. Wallace—Coddrington, who had taken Mr. Coryndon's place, having died. Wallace, who had been administrator of North-Eastern Rhodesia, had succeeded Coddrington, and was now administrator of Northern Rhodesia, the two provinces being in the course of amalgamation. The Chartered Company were exceptionally fortunate in getting hold of a man like Wallace. As a young man, he had made his fortune surveying in the Argentine. Somewhere about 1900, he had taken a shooting trip in North-Eastern Rhodesia, and had been prevailed upon to accept its chief surveyorship, from which he had been promoted to be administrator. His appointment as administrator of the whole of Northern Rhodesia met with every one's approval, for he was a man of strong character, sound practical common sense, full of energy, and thoroughly straight.

The train that took me to Broken Hill had the railway builder's private coach attached, and, on our arrival there, there must have been quite two hundred Europeans to welcome him. Things did not look bright, the distress down below having caused a rush from the south, and, in consequence, too many white men had come up, some walking, some jumping train, and a few paying for their passage. The railway builders were very generous in helping destitute people,

giving everybody for whom they thought they might have employment a credit of 5s. a day in the stores. The Government of North-Western Rhodesia were forced to put a police guard at the port of entry (Livingstone), and no one was allowed into the country unless he could produce £25 in cash, or could prove he was going to employment. Many, however, circumvented the Government.

The first thing I did at Broken Hill was to borrow a couple of axes to build a couple of *msesas* to serve for my camp. I was especially lucky, as I had got my old servant, Musa, back, and a very good Yao cook as well. These two, together with a couple of raw natives, completed my establishment. I was sitting at dinner alone on the first night of my arrival, and I could not help feeling sad as I watched hungry white men after hungry white men pass. Two young boys, both under twenty, called in and asked me for advice. I gave them dinner, and put them up for the night. They were very good youngsters. I showed them the hopelessness of their waiting, and urged them to secure from the magistrate a free passage and food to take them south. They were very chary about accepting what they thought was charity. Before they would do so, I had to show them a copy of the British South Africa Company's Charter, and point out to them their rights as the King's subjects. I was glad they took my advice, and went to the magistrate too, and claimed a free railway ticket and food to take them south.

Living in Broken Hill, I saw, was a mistake, so

I shifted my camp out about 3 miles, where I knew that I would be free from the visits of drunken men and people who wanted to borrow money. As I was the correspondent for three papers, I did everything I could to help both the Chartered Company and the railway builders by the little press work I did. Every week, through the papers, I warned people against coming up. One of the results of my efforts was that the Transvaal Government placarded all their railway stations, warning men not to go north.

Every day I walked in from my camp and saw the manager of the African Lakes, and also the Tanganyika agent, to learn if there was any possible thing doing. Sometimes I took walks up the formation to see how the sub-contractors were getting on, for I was hoping to get a sub-contract myself. I had telegraphed to my friend Hardy, who was now well established near Fort Jameson in North-Eastern Rhodesia as a cattle owner and breeder, to recruit and send me natives if I should have need of them. I had also made arrangements by sending my servant, Musa, up north to get a supply of native labour from the Congo directly I needed it. Still, no chance offered, and I think that this period of nearly two months was the most unsatisfactory of my whole life.

For some time we had been expecting the arrival of Charlie Grey, who was returning as the representative of the Tanganyika Company in Northern Rhodesia. I met him just after his arrival, and was glad to see him looking so well. Apparently he was now completely out of the

wood. It was certainly very brave of him to come back after what he had been through. Grey called me aside, and said, "What are you doing, Thornhill?" "I am hoping to get a sub-contract on the railway." "Do you want any money?" "No, I want work." "Can you hold out all right?" "Yes." Then he tackled the subject about which he wanted to see me. "They don't like your writing." "You can find no fault with it whatever. I have not betrayed a single confidence." "We don't want everybody coming up here." "But I have been trying to stop people coming up." "Well, I think you are making a mistake writing." "I will give it up if you give me something to do." "I have got nothing for anybody to do at present." "Well, all right, I will give it up, but you realise that I am sacrificing £14 a month in doing so." "That is for you to decide. I am not going to influence you one way or the other."

I thought over my conversation with Grey, and as I had a tooth that required stopping, I decided to run to Bulawayo, and make a thorough effort to become friends again with the Tanganyika Company. Blane, with whom I had been always friendly in Katanga, was going down by the train, taking with him £12,000 in gold, about the last that would be won from Ruwe. He had quite interesting work before him, as he was going to accompany Prince Albert, now King of the Belgians, on the first stages of his trip through the Congo. He told me he would be glad of my company—it is always nervous work travelling alone with gold—and we decided to go down together.

The rainy season, which had finished for some time, had been exceptionally heavy that year, and enormous volumes of water were being brought down by the big tributaries of the Zambezi. When we reached the Kafue we saw the marshes flooded for miles, and the water was almost flush with the roadway of the railway bridge. There was a great difficulty in passing the construction trains over, and for safety each truck was pulled over without the engine. From the carriage windows of the train I went down by, several of the passengers wiled away the time fishing during the two hours we spent crossing.

In Bulawayo, the first thing I did was to go straight to my friend Hodges, the editor of the *Bulawayo Chronicle*, and tell him that in my own interest I must give up writing. Hodges urged me to continue, and pointed out the immense amount of good I could do to English interests. He had been humbugged badly with a comic account of some imaginary sports that a talented writer had described as taking place at Kansanshi mine two years previously. Also a man from the south had gone up to Kansanshi, stolen an ingot of copper, brought it back with him, and had borrowed £500 on the security of a copper mine which the thief stated that he owned in the Congo. I saw how necessary it was for Hodges to have a straight man for correspondent. Still, I did not see my way to do the work.

My surprise came when Hodges told me that two men in the service of the Tanganyika Company had a little while before come to him and tried, by offering him a subsidy, to prevent publishing

anything more I wrote. Hodges had indignantly refused, and had sent these two men away, telling them that Mr. Thornhill was an English gentleman, and he believed every word I sent down. Hodges did not mince words in describing the Tanganyika directors and their Belgian partners, the Comité Spécial. I saw that it would not be long before the *Bulawayo Chronicle*, with a view to seeing that the British Treaty was kept, would make a very severe attack on Charlie Grey. I therefore told Hodges of Grey's wonderful heroism, his bravery, and self-control in the face of most awful trials. And I assured him that Grey would do nothing that was dishonourable, and that he was the only leader the English could look to. Before I left Hodges, I discussed with him how far the monopolist's system should be tolerated. I held that the Tanganyika Company, as a reward to their enterprise, could fairly claim the titles to their mines. I saw no good in fighting the Belgians over the tapping of rubber and the trading of ivory, both of which would soon be finished. I begged Hodges to do all that was in his power to enforce in all other respects Article V. of the Berlin Conference and Article II. of the British Treaty. I held that we had a right to buy land and a right to trade. Also I held that the Belgians do not own the native's body and soul.

After my interview with Hodges I went over to the agent of the Tanganyika Company and told him that I had given up my income in the interests of his company, and had further been compelled to spend £33 over a trip to Bulawayo to arrange

things. I urged him to put this before the Tanganyika directors, in the hope that I should have some return service.

A week was more than enough for me in Bulawayo, so I left for the north by the Zambezi express which brought up Prince Albert of Belgium on his journey to see how things were in the Congo. On the train was a golden-haired lady novelist who had announced that she was going to make the journey from the Cape to Cairo.

I had another wretched wait at Broken Hill, a still more wretched one than my last, for I had to realise the money with which I was backing "Tanks," and, further, I had thrown away my income, and with it my power, in addition to the heavy expenses on my trip to Bulawayo. My record of failure was not the only one, and there were many other good men who failed through no fault of their own. I remember Tom King coming down from Katanga. He had been a transport rider in North-Western Rhodesia, and had made a lot of money. Seeing the chances at a big cattle proposition offered in the splendid grazing country west of Ruwe, he had taken up 1500 head of cattle by a roundabout route to the Congo-Zambezi Watershed, just near where the Belgian, English, and Portuguese territory join. He had had a very rough time of it, for fire had swept the country, and he could not find grazing for his cattle, amongst which he had heavy losses. Further, he could not get any title to land in either the Belgian or Portuguese territory where the good grazing was. He was

determined to cut his loss, and sold what was left of his cattle to pay for another outfit 600 miles farther west.

I was especially interested in learning what I could about that country from Tom King; for geography is my hobby. He told me one lion story, which is a good one.

A man called McGregor was made district commissioner of that part of British territory which adjoins the Belgian and Portuguese spheres. He had plenty of work, chasing and catching the Portuguese slave traders. On one of his shooting trips he wounded a lion, which promptly charged him. The lion got him by the back of the left shoulder, and stood holding him as he looked at all McGregor's messengers running away. McGregor called his head messenger by name to come back and spear the lion. The boy, although he heard, ran on. McGregor still had hold of his rifle. The lion was holding him in such a position that he could use his rifle against the boys but could not use it against the lion. So McGregor took a deliberate shot at the head messenger. By good luck he put a bullet through the boy's loose clothes. The boy stopped. McGregor shouted the next time he fired he would kill. The head messenger rounded up the other boys, and together they came back and speared the lion. Marvellous to relate, McGregor escaped without any serious injury.

I could not stand the delay at Broken Hill, for I could not tell how long I should have to wait and do nothing, so I struck camp and trekked up about 30 miles to stay with Nelson, a sub-con-

tractor who I knew was friendly. I was struck by the wonderful efficiency of the railway builders and their people. The railway had been surveyed nearly three years before. But the old route was abandoned, and a new one chosen. Hardly had the location engineers put their pegs into the ground when the sub-contractors were on them setting out earth-work.

Perhaps the reader will wonder why I did not get a start. I consider the reason to be that I did not know then how to put myself forward. Having lived so much with natives, to whom I only gave orders, I was very nervous in the company of white men. Moreover, many men kept coming to the railway builders with wild tales of what they had done and what they could do. The statements of these men were so palpably untrue that it made it very difficult for a stranger, such as the railway builder's representative was, to distinguish truth from falsehood. To some extent I was to blame myself. Although I was always smart and clean, I wore less clothes than a boy scout, and no one knew where I lived. No one in authority at Broken Hill, except my friend the manager of the African Lakes, had any idea of my extensive knowledge of the conditions of the country through which the railway was going.

On my way up to my friend the sub-contractor, to whose camp I was going, I was out shooting alone. I walked, without knowing it, within 15 yards of a fine bull elephant before I saw him. He was facing me, and I watched him flapping his ears as he fed. Three times I put up my rifle to fire.

I was afraid of the consequences. I reckoned his tusks to weigh close on 100 lbs. Ivory would have fetched 12s. 6d. per lb. at Broken Hill. I had not the £50 to take out a licence. I knew that if I did kill him, and did not find the money for the licence before the magistrate heard of my having killed an elephant, I would be "in for it." And I should be compelled to pay a fine in addition to paying for the licence. I had not the money. It meant that I would be sent to prison and then deported as an undesirable, unless I deliberately chose to become an outlaw.

The organisation of governments in Central Africa had completely deprived the elephant hunter of his living. I am not a Socialist, but I think English, Belgian, and Portuguese alike should amnesty certain outlaws—men who have not offended against any moral laws, but have merely not recognised the changed conditions. In North-Eastern Rhodesia the licence is £25 to kill two elephants; in North-Western, £50 to kill three elephants. In the Belgian Congo the trouble and delay in obtaining a licence is great. Its cost is £20, and the Government claim half the ivory. I do not know the laws in Portuguese Angola, although I have a friend (an outlaw) shooting there. I do know that the Portuguese officials steal as much as they can of any ivory obtained. In German East Africa the conditions are good, and every man I know who has been in that country speaks highly of the German Government there as the small man's friend. The licence there is, I think, £10, and need not be paid till the first elephant is shot. There

is a small tax on each elephant shot, and a small export duty on ivory. This amounts to about £6 in all. A hunter, who made a nice little fortune shooting there, was killed by a wounded bull elephant about this time. The man had been in the employ of the Tanganyika Company, and Harrison had dismissed him for incompetence (save the mark). "Starting in" on his own, he shot fifty-one elephants in one month, his first shooting trip bringing him about £4000 cash.

On my way up to stay with my sub-contractor friend, I visited every camp along the construction, and was hospitably entertained and kindly treated by every one. I renewed my acquaintance with one of the railway builder's engineers, a man whom I had met previously in Portuguese Angola. One little incident pleased me very much. On my way down south, some five months before, I had met a Greek who had been waiting two years on the railway going north. He was then anchored down in a native village and living on mealie meal, for he was absolutely penniless. As it was near Christmas time I thought I ought to do something for men in worse plights than myself, so I had bought from the African Lakes some flour, tea, sugar, and ammunition, and sent them out to him. When I passed through his camp he was working on the formation, and I talked to him for a few minutes. He said nothing about repaying me, nor would I have accepted payment. But just after leaving him I put my hand into my pocket and found some gold in it. I could not send it back to him, although it was about four times the amount I had spent on him.

During my stay in Nelson's camp, I did a little work in order that I might be occupied and be of some service to my friend. The work I did was to make a cutting through a big ant-heap. It was 130 feet through at the base, and 24 feet high. This was a big one, but by no means the largest I have seen. These ant-heaps, many of them young mountains, are one of the striking features of the high plateau country of Central Africa, and, as far as my experience goes, they vary from a minimum of 1 to 5 acres to a maximum of 5 or 6 to the acre. Only the top is alive, and they must have taken centuries to build up. These ant-heaps have their special flora, such as the wild African fig and the hard-skinned Kaffir orange, growing on them. The only thing of economic value that grows on them is a dark green triangular-shaped reed. The fibre of this reed makes the best string I have ever used. We found it so good that in Katanga we actually made on the ground mine ropes of this fibre.

The white ant is not a true ant, but a beetle which is called a termite. He works only at night, and will eat anything he comes across. I always had a native mat of dried grass on the floor of my tent, and many is the time I have been awoken at night hearing the grinding chaw-chaw of these insects. They did not eat my gun-stocks, for there was always too much oil on them for their liking. They, however, had a good tuck-in at my boots if I had been foolish enough to leave them out on the ground at night. On account of the white ants, the railway sleepers in Africa are made of iron, and every traveller finds it best to

have his clothes and valuables in tin boxes, preferably small Japanese uniform cases. The termites are of two kinds—the one that makes big ant-heaps and the one that makes little ant-heaps about a foot to a foot and a half in height, and 6 inches through. These little ant-heaps are a great nuisance in bridging on the native paths. The Grey pattern Humber bicycle is designed to prevent the rider being inconvenienced by these little ant-heaps. Its frame is higher than the ordinary safety bicycle, the pedal shank is considerably longer, and it is a free wheel. Thus the rider, if his pedal comes near one of these little obstructions, can raise the pedal to clear any little ant-heap. White ants are not wholly a curse, for they eat up the fallen wood in the forest and destroy the deserted villages of the natives, who are "semi-nomadic" within a given area. Ant-heaps make excellent plaster for houses, and are also good for making bricks. I have metalled approaches to bridges with powdered ant-heaps over the top of my earth-work, and have found it most satisfactory. The natives do not eat the ordinary worker white ant, but dig out fat queens just as the ant bear does. They also eat the winged white ants that come out of their holes during the latter end of the rainy season.

To attempt to describe the true ants of Africa would fill a volume. Only two kinds have annoyed me—one kind a small black ant that comes in myriads and eats food, meat, or anything else it fancies. Their invasions are usually stopped by grass fires. The other kind are big red ants. They generally inhabit rotten wood.

They will bite right through one's trousers, and sometimes will stampede cattle. They are really vicious and dangerous.

After a week's stay with Nelson, the sub-contractor, I trekked into Broken Hill, a distance of 27 miles, arriving there about midday. As I felt ill, I walked over to the doctor and lunched with him. After lunch he took a slide of my blood, and showed me under the microscope the crescent-shaped forms of malignant tertian malaria. He then handed me the thermometer to put in my mouth. I looked at it before handing it to him. It registered 105·6. He bundled me straight off into the hospital.

CHAPTER XVI

THE LAST ADVANCE

WHEN I went into hospital I thought I was going to have a bad time of it. The doctor was very serious, and warned me about cerebral symptoms in malaria, telling me if I took it out of myself when I was ill I should die; further, he advised me to get out of Africa.

I gave the doctor a real surprise. It was a Saturday afternoon when I went into hospital. On the Sunday morning one of the railway builder's engineers came in and asked me if I could start at once and go up and join Carter, their chief engineer in the Congo. Almost immediately my temperature went down to normal. I would have willingly started that night. However, that was impossible, as I had to arrange things, and I could not get people to do what I wanted as quickly as I wanted things done. It was not my fault that I did not get away until the Tuesday morning.

In the afternoon of the day before I started, I witnessed a very serious incident, but one by which I could not help being amused. The doctor passed my camp on his bicycle in the wildest state of excitement. One of the Government cows had died. The natives, unless they

are Mohamedans or belong to cattle-owning and therefore ruling races, are even more foul feeders than vultures. Some enterprising native had cut up the dead cow and he and his friends had sold it all over the place. The doctor, who was a keen scientific inquirer, had made a microscopic examination of the animal's blood to determine the cause of death. He found that it was anthrax. He therefore collected a gang of natives to go down and burn the dead cow, for fire is the only thing that will destroy the anthrax bacillus. He found the cow gone. When I saw him he was careering madly round the place to collect the diseased meat. Bidding him a cheery good-bye, I told my servants to run behind him and lend him any help he wanted. Although much of the meat was eaten before the doctor could seize it, by some strange fortune no outbreak of anthrax occurred.

Prince Albert had travelled up the road about a fortnight before I started, and I heard all about him as I went up. At Sikania's village, just over the Congo border, the escort of the Barotsiland Native Police handed him over to the Belgians. When the two lots of troops met at Sikania's village, some 6 miles over the border, they presented arms to each other. An eye-witness told me that the British escort, although they were on trek, looked smart and formed up really well, while the Congo troops looked dirty and unsoldierlike and gave the appearance of something like the shape of a large S. The Prince gave sundry presents and also arranged that the British officer should be given one of the Belgian Congo

orders. I heard that at dinner that night he expressed himself strongly about the Belgian soldiers.

The accounts of the Prince were all most favourable. It was certainly a plucky thing to do to make that hurried trip through the Congo. It was unfortunate that he did not wander off the beaten track, and still more unfortunate that he was only allowed to see things through Belgian eyes. Carter, the railway builder's chief engineer, told me an amusing story about him. He had met the Prince on the native path somewhere in the neighbourhood of the border and had asked permission to take his photograph. Carter was just about to press the button when the Prince stopped him with, "Excuse me a minute. I will take off my eyeglasses. If you took me with them on, people might mistake me for a missionary."

All the way along the road up I was treated very well at every camp I passed, for every one knew that I was going up to the chief engineer, and that although I was only going to drag a chain, my work might lead to my doing really well. I struck the main survey camp about 5 miles south of the Congo border. There I was most hospitably entertained by Hibberton, the location engineer, who told me of Carter's whereabouts.

At Sikania's village, the first village over the Congo border, I had an amusing experience. I was alone, for I always outmarch my carriers and servants. I knew there was a bad swamp ahead on the Belgian road which I intended following.

As I walked into the village I called the first native I saw and told him to bring the chief. The chief came and addressed me without saluting. I did not like this, but I did not resent it, nor did I resent his speaking to me standing up, although native etiquette demands that the inferior should always sit or make a pretence of doing so. I told him I wanted two boys to carry me across the Lukangawa swamp. He asked me what I would pay for this service. Having nothing with me, I took out my notebook, tore out a page, and said that I would give an order on the African Lakes Corporation for two yards of calico. This may sound complicated, but my words were: " Kalata ku Mandala insaru ifi " (" Letter to Lakes calico so "), illustrating the amount of calico I would give by stretching out my two arms to full length. The chief wanted the calico and not the letter. I asked him if he knew to whom he was speaking. He replied:

" To a white man."

I never allow myself to be called a white man, so I said pretty sharply:

" To a white man ? Am I a white man ? "

" I hear," said the chief, meaning yes.

" I am Chingala."

In a flash the chief was grovelling on the ground, clapping his hands.

" My Lord Chingala."

Then, rising, he waved his hands round his head and shouted to his people:

" The Lord Chingala has arrived ! All people come here ! "

It was the whole village that saw me over the

swamp, and there was no mention of yards of calico.

I had thought the Belgian road—the native path between villages which had been hurriedly scuffled and widened to make it look like a road for the Prince to travel on—ran much closer to the border than it did. It would, I saw, be folly to follow it, although I expected to overtake Carter on that road. Besides, I had promised Nichol, the partner of Nicholls (a curious coincidence of names), that I would be camping near a certain native village in British territory on a certain day, and that he could count on me for a night's shelter and food as he bicycled through to the Star on business. I, therefore, on my second day's trek after crossing into the Congo, struck across the border again in order to keep my promise to Nichol and with a view to following the main transport route till I heard where Carter was.

Whenever I crossed the border I always did my best to fix by eye the exact highest point of the very level watershed, the summit of which was the International Boundary. Having determined it as near as I possibly could, with the aid of local natives' advice, I chose a big tree and had a big slab of bark removed from each side. On the Belgian side I would, with a piece of blue pencil, mark a big "C" to signify Congo, and on the British side I would make a "Z" to signify Zambezi. In the 250 miles of the 1700 miles that form the Congo-Zambezi Watershed, which I know intimately, I had a dozen of these trees marked to serve as boundary posts until an inter-

national commission came along to delimit it. Nichol, to ensure his night's shelter, had not travelled by the main road, but had asked the natives which way I had gone, and had followed on their directions. He caught me putting on one of these "C" "Z"s. Personally I did not like white men knowing what I was doing, because they would only say it was impertinence for a white man with no power to make an attempt at marking out the border. I did it for my own amusement, just to see how near my guesses would be to the right positions when they were accurately fixed.

The day after, Nichol bicycled on ahead. I, about half a day's journey farther on, ran into a poor white man with his boots half off his feet and without food or money. I gave him some of my stores and some money and also directed him to a wood-cutting contractor with whom, I thought, he might find work. This man was in great disgrace with the railway builders, for he had told them that he could find coal up north close to the railway route. He was peremptorily dismissed when one of the engineers caught him looking for coal in granite country. Personally, having heard both sides, and I can say this without any treachery whatever, I think the man was badly treated, for the railway builder's representative ought to have examined the man as to his abilities, and also to have obtained the two different geological maps, one turned out by Studt, the Tanganyika mineralogist, and the other turned out by Cornet, the Belgian scientist.

The rest of my trek to Kinsenda was devoid

of incidents. I missed Charlie Grey, who passed, travelling on another path, about two miles away. I had an attack of fever, which, I am glad to say, was the very last of malaria I had in my life. I did not allow it to delay me. I shot a lot of ducks at a pan, and these I brought into Kinsenda, where I made the acquaintance of Carter and the two Belgian engineers with him.

Much to Carter's annoyance, some Belgian financier had suggested that the distance between the Star and the Congo border should be accurately measured. There was a possibility of some £30,000 depending on this measurement, due entirely to the fact that the negotiations with the English firm of railway builders had been carried out in a great hurry. Common sense should have suggested that the business was a matter of negotiations and not measurements. However, as measurement had been decided on, Carter stayed with the Belgian engineers to see that they did their work properly. From the first he stopped them reading distances with the tacheometer, and made them chain instead, he dragging one end of the chain himself to ensure accuracy. Further, he would not allow them to read bearings from the compass needle,—a serious Belgian failing,—insisting that an observed azimuth should be carried up the whole way. It was to avoid having to drag a chain himself that Carter sent down for a man like myself.

After a couple of days' chaining my capitao Charikosa arrived, together with an old shooting-boy of mine, both having travelled over 700 miles to join me. Carter was keen on getting the work

done, and seeing that the Belgian engineers were thoroughly conscientious, he left the measuring of the distance to them, and put me on to cutting the lines ahead. I was at once in my element, and immediately changed my whole style of living. With my boys I camped on the ground where we halted at the end of each day's work, while the Belgians bicycled back to their own camp. In two days I had increased, by cutting long straight lines, the distance traversed each day, from 4 to 9 kilometres.

A day out of the Star, one of the Belgians shot a roan antelope. It was his first buck, and he wanted the skin. The natives, who are wantonly cruel, when they are not looked after properly, promptly started skinning the beast while it was still alive. I rushed over to where the natives were, kicked the boys out of the way, took the Belgian's rifle, and put a bullet into the buck's head, giving it its quietus. It was through that incident I managed, somehow or other, to injure myself in such a way that walking was a difficulty. Consequently I did not work the next day, and had myself carried into the Star, just outside which I had camped.

While I was having my bath, I had a visit from my two friends, little Billen and Hurst, the diamond drill man. Billen noticed that I had with me my servant Musa, my capitao Charikosa, my old shooting-boy, and a really good and intelligent Yao cook. He told me he could never understand how I managed to get so well served, for I was hard on my people, and did not overpay them. I pointed out that I always played the game with

my people, got them out of trouble when they got into it, and always saw that they were comfortable and well fed. Billen advised me to give up Katanga as I had not a good name with those in power. I tried to pin him down to the reason of my bad name, but all he would say was, "Get out and go for them." It was the same story everywhere. Douglas had advised me to leave Katanga. McDonald, the labour recruiter, had told me that it was no good any man staying in Africa unless he was making a thousand a year working for wages, or double that amount on his own, and he added that I should never see that in the Southern Congo.

The news of the Star was interesting. The Comité Spécial had impressed a lot of labour for carrying the Prince's loads through the first stages of his journey. The impressed carriers promptly deserted. McDonald had foreseen this, and had held in readiness large gangs of voluntary carriers (which he had working on buildings and on the farm he had taken up near the Star) ready for this failure. He cleared a profit of £600 out of his foresight.

The Prince had made himself liked at the Star, and endorsed the petition, got up by the Belgians themselves, that little Billen should have the sentence against him cancelled. He at once sent runners down south with a telegram to Brussels, and secured for Billen his uncle King Leopold's clemency and free pardon.

The Belgian engineers were returning south. Carter decided to put on the railway route. There were two possible routes to take to Kinsenda,

one following the left bank of the Kafubo for 24 miles, and then taking an easy line of country to the Congo-Zambezi Watershed. The other was to strike straight up to the Watershed and follow it the whole way down. There was no question which was the better route. The only question was that if we struck straight to the Watershed, would we be going down too far out of our way? To decide this, Carter asked me to lead him down, he himself following with a measuring-wheel. I was in the pink of condition, but, unfortunately, the blood-vessel I had ruptured two days before was in a very awkward position for walking. The wound, which was clean and fresh, showed signs of ulceration, not because I had neglected it, but because I moved about too much. The chance of putting on a whole line of railway was too good to miss. The little Belgian doctor, knowing of my ability to travel, said that he thought I could undertake the journey, but that I must take calomel daily, and rest as soon as I possibly could.

Carter and I left the Star (or rather Elizabethville, as it now was called, for the Prince had renamed it after his wife) one afternoon. Carter on foot, myself in a hammock. First we went to the ground that had been chosen for the smelter site. Carter stayed there the night. I began my work. I blazed through the forest to where there was a good crossing to serve for a railway bridge over the Kafubo River. At this crossing I camped.

The next day I had a very easy day. I had blazed out about 5¾ miles, and I felt that I was climbing too much, so I halted for Carter to overtake me.

We then struck magnetic south and camped at a small stream about two o'clock. The next day was a field day.

I had breakfasted before five. At the first red in the sky I started, with sixteen axemen following me to put blazes fore and back of each large tree to my right and left, and to slash down every small bush behind me. Progress towards eight o'clock became very slow, as strong local attraction affected my compass, and I had to walk, using my watch and the sun. Just farther on, I skirted a huge dambo, and I was a bit uncertain whether I had not gone a few hundred yards into British territory. There I waited for Carter to come up, but he told me to shove on, or we would never make our camping-ground that night. At eleven o'clock I had outdistanced Carter sufficiently to risk having lunch. So I stopped for half an hour and had tea cooked, for I was carrying a large supply of water. At three o'clock in the afternoon, I struck the first water (a tributary of the Congo) about half a mile from its source, which I could see. Here I halted and had another cup of tea, and waited for Carter to come up. We had done 14 miles.

Four miles farther on I had expected to strike the traction engine road which zigzagged in and out of the British and Belgian territories. I had a fire lit and another cup of tea made, while I waited for Carter to come up with his measuring-wheel. He remarked that we must be close to the traction engine road, so, taking my watch from off my belt, I called a native, and gave it to him, telling him to walk to the road at right angles

to the direction of our route. On his return I halved the time he had taken to go there and back, and allowed for his travelling at the rate of 100 yards a minute, and told Carter what was the distance to the traction engine road. The incident amused Carter, but he ridiculed the idea of lending the native my watch. It may sound silly, but I have always found in offsetting distances that entrusting a watch to a raw native prevents other things delaying him, and keeps his attention on his object.

The sun was setting when I reached the Belgian stream on which we had decided to camp. I promptly proceeded to cross it. The boys begged me to camp where I was, for they feared that I was going on farther. I refused, telling them that I was not going to wet my feet in water in the cold of the early morning. On the far side of the stream, a mob of guinea-fowl rose, and I knocked one over. I pitched my tent at once, for my own carriers had kept up with me. I had washed, shaved, and had my hot bath before Carter and the rest of the party arrived. The measuring-wheel showed over 22 miles.

I felt inclined to crow, for my injury had caused me a lot of discomfort, if not actual pain. The story Carter told me at dinner that night made me think much less of my achievements.

Carter pulled up his right trouser and showed me his leg. In one place, in the shin, the leg was little thicker than a man's finger. He told me the story of how the injury was inflicted. He was in Uganda, looking for a route for a branch line to connect up the celebrated Magadi Soda

Lakes with the main line of the Uganda Railway. Seeing a rhino, he went after it. In running, the boy behind him managed to fire off Carter's ·577 express, which he was carrying. The bullet smashed Carter's right leg to smithereens. Luckily, Carter had the weight of his body supported on his left leg at the time. So he was able to lower himself carefully to the ground. His people carried him to the railway and flagged a train. He spent eight months on his back in the Nairobi hospital before he was able to set his foot on the ground again.

Considering that Carter was very much of an office man, and had not had my outdoor training, besides being a much older man than myself, I think that march was a marvel for him. Seldom had I then done a longer journey on foot without a path. I remember when one time I was following up a mob of eland, thinking to come up with them at any time, as their droppings were hot and fresh. I reckon I did 35 miles that day. The longest distance I have done, walking on a path in Africa, is, I think, just under 45 miles in the day.

I asked Carter what he thought about the Star. He was disappointed in the size of the mine. Still, that was nothing, for, after all, the Star was only one mine, and very far from being the biggest of the great Katanga Copper Belt. He shook his head over the enormous office staff they had at the Star, and the reduplication of the work, owing to English and Belgians not understanding each other.

The most interesting thing that Carter told me

about was the wonderful Magadi Soda Lake. The Lake, which Carter described, was some 18 miles long and from 2 to 5 miles wide, or, roughly, a hundred times the area of the Star of the Congo mine. From water in the north it gradually turned to soda in the south, which in the pink haze of the distance showed up a still and glistening white in a striking contrast to the rocks of black lava which surrounded Magadi, and which in scarp after scarp broke the edge of the lake into a series of finger-shaped bays. I have heard about Magadi from other men, and it certainly is a wonderful thing. The financiers who have hold of it are the Shell Transport people, and as everything they touch turns to gold, Magadi shares would be well worth while watching.

The next day I was up again before daylight. I reached the traction engine road after blazing 5 miles. There we halted and had breakfast, after which we followed the traction engine road till it was evident that we had gone into British territory. To our south and to our south and west was a group of broken hills and one small, well-defined chain. We left the Watershed and struck almost due east. After crossing a deep spruit, at which I could see the engineers would have a lot of trouble, we struck a native path and wandered up to a small village on the Mush-oshi River, the only big southern tributary of the Kafubo. As it was only fair to our carriers to give them a chance of getting some relish with their food, and possibly a drink or two of beer, which is almost a necessity to the natives of

Central Africa, we decided to halt for the night. Our trek that day was 16 miles.

The next morning Carter left me, as he wanted to catch the mail. After giving me instructions what I was to do, he bicycled off to Austen & Fowler's to write his letters home from their store. I followed the native path for 4 miles, there being no need to blaze, as the railway would evidently be about half a mile to my south on a level water parting between two small eastern tributaries of the Mushoshi. At the head of these tributaries I started to blaze into Kinsenda, just keeping inside Belgian border. After I had gone about 4 miles, I came to a big vley, nearly a mile wide where I crossed it, some 700 or 800 yards below its head. From the centre of this vley I think I had the finest view I ever had in Central Africa. The country was falling about 300 feet in a mile, and the grass opening of the vley was widening as it fell. From where I stood I could pick up the whole course of the West Luembe River to its junction with the Luapula, and beyond, some 120 miles away from where I was standing, I could see some of the high country of North-Eastern Rhodesia. It was a splendid site for a farm or a government post. I halted that night about 4 miles out of Kinsenda on the path, and waited for Carter to join me. I did not want to go into Kinsenda post, and have to mix with Belgians, native women, and black and white babies, all living in a small pole and daga-thatched hut, for such the Government station of Kinsenda then was.

The trail from Kinsenda had already been blazed by Morseni, so I was able to hammock down the rest of the way. We decided to make one of our camping-grounds at the pan where I had got the ducks on my way up. Leaving Carter to have a cup of tea with two white ladies who were travelling down the road—we were getting horribly civilised—I went on ahead, meaning to do great things. The duck, which were sitting on the pan, were out of gun-shot from the bit of low ground where I always fired from. Looking round, I saw that a tall tree had fallen through the thick undergrowth in one place, and that along it I could walk out quite a long way into the pan. The ducks were swimming close to the head of the tree. I walked along the trunk of the tree, which was about 5 feet above the water. I was about three-quarters of the way along it when the ducks rose. I fired, missed, and was on the point of pulling the trigger of the left barrel when I heard a sudden loud buzzing from underneath my feet. I knew what it was. Thousands of hornets—the big black ones. Automatically putting my gun to safety, I dived into the water. Three times I put my head above the water, but each time I could hear the buzz. Once they settled on my head, but I was under too quick for more than one to sting me. That brute got me high on the chest, and I have the mark to this day. I struck a snag which projected out of the water, against which I laid my gun, and then, free from encumbrances, I swam boldly under water out towards the centre of the pan. I rose again. There were no hornets, so leisurely

I swam to the far shore. Half an hour later, when the hornets were quiet, I went in and retrieved my gun.

Carter when he joined me laughed at my plight, and was much surprised that I had got no ducks. There were a couple of teal on the far side of the pan, and he suggested I should shoot them. Together we walked round and flushed them. They rose and gave me an easy right and left. The scare and the wetting had shaken me, and I missed them both. That trek down was full of bad luck. I had disputed with Carter about 3 or 4 miles of the watershed, and had to admit—a thing I never like doing—that his mapping was right and mine was wrong.

I stayed a little while in the main survey camp, doing draughting work and calculations, and shooting guinea-fowl morning and evening, while Carter went down south. Soon after he returned, he sent me for a few weeks to help the man who was deviating behind.

It was while I was on this deviation work that I met George Grey for the last time. It was a Saturday afternoon. We had worked on until two o'clock and then knocked off. There were several complications in the Watershed for the first 16 miles from the point where the railway route crossed the Congo border. For my own benefit I wanted to determine the lines of true and false watershed. I had sent my servants to run me up a shelter at a water-hole near a fixed point, some distance in the forest. I intended to follow the true watershed round on Sunday. However, hearing that George Grey was camped

on the Belgian road, and that he intended visiting the Star of the Congo mine previously to travelling through North-Eastern Rhodesia and German territory to Uganda, I cycled over to see him.

I was really pleased to see Grey again, but he was not over-pleased to see me, although he remarked that he was very glad to see any of his old men back. He spoke very severely to me about writing in the Press, saying that *they* did not like it. I pointed out that I had only once written an article during the whole time I had been either in the Belgian or English Company's service, and that any other writing I had done when not in their employ was entirely in the Company's interests.

I tried to sound Grey about his proposed trip up north, and could not gather whether he intended to come out in Abyssinia or go down the Nile. I then asked him about his work in Swaziland, where he had been the Chief of Commission, appointed by Lord Selborne to fix up the muddle over the overlapping concessions, granted by the last native king before the days of the Boer rule. I knew Swaziland fairly well, for after the South African War I had travelled hundreds of miles in that country. Grey told me that his work had been really hard. I quite realised the truth of what he said, for the Swaziland muddle was a real tangle. However, I could not agree with him that Katanga was an easier country than Swaziland, for I think that any country in which horses can be used is an easier country in every way than one in which reliance for transport has to be placed on

human beings, even if men are only paid 3s. a month, as we paid our carriers in Katanga.

Just as I was about to leave, I said to Grey that he was going to take a rather long route to the Star. "Teaching again, Thornhill," said Grey. "You are altogether too fond of teaching people." Then I let him have it. Drawing a map with the toe of my boot on the scuffled ground of his camp, I described in the minutest detail the Belgian road, the native path, the blazed trails, the traction engine road, rivers, hills, and, as far as I knew them, the true and false lines of the Watershed (International Boundary). Grey was much surprised, and more so when I told him how I had intended to spend my Sunday. I whistled to Musa to bring my bicycle, and saying good-bye to Grey wished him a pleasant trip and "safe home." Grey laughingly remarked that he agreed with me when I said I knew Katanga, and he hoped that I should be able to turn my knowledge into commercial account.

Owing to my visit to Grey it was nearly eight at night before I struck my camp, with Musa following me and carrying my bicycle through the forest. There was a hot bath and a good dinner waiting for me. As I smoked my pipe before turning in, I thought a lot over what Grey and others had said to me, and decided that unless I could settle properly with the financiers at home, I would give up Africa altogether.

Poor Grey! I think he was the bravest man I ever met. I have met few with as great a power of physical endurance. I doubt if ever there was a man in the world who could be as calm as he was

under all circumstances, or a man who could keep himself so spotlessly clean and spruce, no matter what he did. I have heard him described as the greatest Englishman of his day.

The story of his death is typical of the man. We always said in Katanga that the lion would get him. After I saw him, he went up to Uganda, returned home, and then went out to Uganda again. He was stopping with Sir Alfred Pease, near Nairobi, when he came by his end.

Grey's last hunt took place on Sunday, 29th of January 1911. The party consisted of seven mounted men. Two of the party saw a couple of big male lions making off, and galloped after them to keep them in sight. Grey, seeing the game, and not grasping the tactics of the other two men, put his horse to a gallop and practically started to course the brutes. Seeing one of the lions preparing to charge, one of the two men who were keeping the lions in sight, dismounted, fired, and missed. Grey had jumped off his pony and was awaiting the onslaught of the lion. Twenty yards off Grey fired, hitting the lion in the shoulder. Five yards off he got in another shot, breaking a couple of the lion's teeth. The lion threw Grey on the ground and began to worry him, just as a dog worries a rat. The nearest man of the party was 300 yards away. He covered the distance at full gallop. When some 50 yards off, the lion noticed his fresh antagonist, and ceased to maul Grey.

The rest of the party were arriving helter-skelter. At 25 yards off they dismounted and ran towards Grey; the lion immediately made

for them. At this critical moment one man's rifle jammed, and he was out of action. Simultaneously two of the party fired, both bullets entering the lion's ribs. The wounded lion, who had now four shots into him, made a final effort and returned to his victim. The horrified onlookers hardly remember what happened in the next brief moment. The lion was on top of Grey, and animal and man were so mixed up that it was almost impossible to distinguish the former's head from the latter's body. All the while the other lion stood growling and lashing his tail 100 yards away. But the party paid no attention to him, so intent were they to save their comrade. Finally, when the wounded lion was almost lifeless, one man managed to place a shot in the lion's head, and thus rescue Grey.

Grey's wounds were many. The lion had clawed his face and head, bit his arms, hands, and thighs, and had inflicted serious injuries to his back. Grey was perfectly calm and collected. He quietly instructed his anxious friends how to handle his lacerated body. He died three days later in Nairobi hospital.

The story had two morals. First, the folly of using small-bore rifles, for Grey and the rest of his party were armed with ·265 Mannlichers. The second moral is, never to tackle a dangerous animal without a gun-bearer who can be trusted to hand a shot-gun to the hunter or use it if necessary, should the animal charge.

CHAPTER XVII

GOOD-BYE TO AFRICA

THE day after I left Grey I spent one of the happy days of my life. Leaving my camp in the bush I struck out to find the head of the Lukangawa. For two miles I walked through a big dry dambo of about three thousand acres. There was no sign of any river, but every here and there were water-holes, and frequently I saw little lines of earth-work about nine inches high and perhaps three or four hundred yards long. These had been made by the natives to hold up the surface water. There were little openings in these ridges in which the natives placed their fish-traps in times of flood. It seemed strange that fish could live in a dry expansive grass, but this was evidently the case, for every rainy season the natives used to catch hundreds of cat-fish. These fish must have lived in the soft mud below the hard-baked ground, covered with long grass. I have known cat-fish to live very long after being taken out of the water if they have been kept in the shade, for my boys once caught one in another river, and when I found it, it was still alive five days later. I put it into water and it swam away as if nothing were the matter.

At the head of the dambo I found a stream

that was the Lukangawa's head, and I followed this stream (which soon became a dry gully) up to the Watershed. I then followed the true Watershed to the source of a stream in British territory. I then crossed the Watershed and found the source of a stream flowing into the Congo Basin. This stream lost itself in a dambo of about five thousand acres in extent that lay between the true and false lines of watershed. Some of the water of the drainage basin surrounding this dambo found its way under a line of low country and beneath the dry Lukangawa dambo to the big wet swamp adjoining Sikania's village. But the greater part of the water flowed under the false watershed and came out some four or five miles farther on as a fine stream, knee-deep and running strong. This was the source of the East Luembe River.

By the head of the East Luembe River the location engineer, who was deviating, and myself were camped. Five hundred yards from our camp we located the first railway siding over the Congo border. The siding was an ideal site for a small town such as would ultimately spring up round the place—a town that would be a railway divisional point, a customs' clearing-place, and a Government and police post of some importance. Two men had already foreseen this and had started in a small way as traders. These men were hampered to some extent by want of capital, but much more so by the Belgian laws dealing with trading licences, which afforded none of the protection to an individual storekeeper that the really excellent licensing system of the British

South African Company gave in the adjoining territory.

I was well satisfied with that day's work, for I had got into my head all the complications of the country, caused by a 16-mile ridge of shale overlying a formation of crystalline dolomite, through which the water in times of flood was carried off underground. To make doubly sure of the boundary I walked back to the Lukangawa and then through the lowest line of country to a point on the traction engine road, where I had told Musa to meet me. The point I had given Musa was a tree I had blazed about 3 miles from our camp. The sun had just set when I struck the traction engine road exactly 170 yards from the blazed tree I had tried to hit off. So well had the time worked out that I had only kept my servant waiting for a quarter of an hour. I could not help feeling pleased as, in the chill of the short twilight, I bicycled back to camp.

Some days before I met Grey we were camped back on the located line at a water-hole which I had discovered in the Lukangawa dambo. We were more or less away from the whole world. There I had an accident which might have meant a very painful death if I had not acted at once.

It has always been my practice in Central Africa every night after dinner to dress the sores, wounds, and injuries of my workers. I was sitting outside my tent that night. By my side was a bowl of hot water, some surgical instruments (knives and scissors), dressings and bandages, a bottle of tabloids of corrosive sublimate, and a cup of tea which my cook had just brought me.

After dealing with my patients I took a sip of tea. It tasted wrong. I sent for my cook and asked him what was wrong with the water. He said that the water was all right, and fetched the bucket. I tasted the water in the bucket. It was excellent. I concluded that the kettle was dirty, and made a mental note to pay a surprise visit to the kitchen in the morning. Then I drank the tea in one gulp. There seemed to be something at the bottom of the cup. I called for Musa to bring a light. The bottom of the cup had a thick sediment of blue in it. I remembered that the tabloids of corrosive sublimate were coloured blue to distinguish them from other medicines. I picked up the bottle of corrosive sublimate. It was almost empty. I saw that somehow or other I had managed to knock the bottom off the bottle and that the contents had fallen into my tea. How many grains of corrosive sublimate I swallowed I do not know. I rushed to the cook's fire, swilled half a gallon or more of tepid water, and, after waiting about half a minute, shoved my hand as far as I could down my throat, twisting it round. Three times I made myself thoroughly sick. Then I drank the contents of six tins of ideal milk, which is one of the antidotes for poisoning by corrosive sublimate.

I went back to my tent, sat down at my camp-table, and wrote clearly and concisely exactly what had happened, pointing out that I had not committed suicide, nor were my servants in any way to blame. I ordered Musa to sit up and watch me during the night. I lay down and was asleep in less than a minute. I woke up at

dawn and found Musa sitting at the head of my bed and looking at me. I felt pretty weak for that day, and the next two or three days as well, but I did not let that interfere with my work.

While I was in that camp I received a letter from a cousin of mine in England, telling me that people only went to Africa to make a quick fortune out of mining, or to shoot big game. He wrote that he could not see his way to finance a scheme of motor farming. This was the only proposition I "put up" to London from Katanga.

I had seen that the natives in Katanga could not possibly produce enough native foods to feed the workers on the mines. I had also seen that the cost of carrying up meal from the south would mean that for transport and customs' duties a charge of 5s. for each 200-lb. bag would be levied.

The big "fly" belt began about 12 miles north of Broken Hill, whence northwards nearly all the British territory and the whole of Katanga east to the Lualaba was "fly." In such a country no farming could be carried on, except by using mechanical means. I had, therefore, asked for finance to enable me to go in for a farming scheme. I intended using oil-driven tractors for ploughing, harrowing, cultivating, and harvesting, and meant to start growing mealies (maize) and Kaffir corn (millet) on a large scale. I should have chosen my land either on the Kisungu Flats which bordered the Lufira, or in the open and level valley of the Nkando River. Both of these places were within the Copper Belt as well as being close to prospective railway routes.

The business I put forward was a sound one,

if the country had been properly run. I had reckoned on requiring £4000 cash to buy machinery and pay labour. I reckoned that almost from the start I should be able to make an income of over £7000 a year. Against the business was the silly way the Belgians administered the country. They gave no titles whatever to land, although by the British treaty we were allowed to purchase land and to engage in any legitimate occupation. I have studied from beginning to end the whole of the Congo laws. Apparently all that could be definitely obtained were licences to occupy land.

For market gardens, which could not exceed 125 acres, the Comité Spécial, who had a third interest in the land (the Government having the remaining two-thirds), issued licences of occupation, charging 10 francs for the first 25 acres and 5 francs for each succeeding 25 acres. For large farms, which could not exceed 5000 acres, they asked an annual licence (really rental) of 10 francs for the first 250 acres and 5 francs for each succeeding 250 acres. The tenure was not secure, since the Comité Spécial could dispossess at any time, granting whatever compensation they thought fit. Such land laws were absurd. Another absurdity was the date from which the annual licences ran. They ran from the 1st of January, *i.e.* the middle of the growing season. The licences should have run from the middle of June, when the work of preparing the ground for seed would begin.

Moreover, it is only fair that the pioneers of a new country should have some return for their work and for the risks they ran. The Tanganyika

Company paid its men, with the exception of a favoured few, badly enough, and fed them worse. The Comité Spécial fed and equipped its people really well, but the wages they paid were disgraceful. A few of the prospectors and some of the favoured office staff got substantial cash rewards in addition to their pay for the discoveries made by the Tanganyika Company's prospectors. But no rewards were given such as the British South Africa Company gave to the men who went ahead for them, for the Chartered Company's pioneers were able to obtain free of cost a grant of 6000 acres of land each, and they could select these grants in any part of Southern Rhodesia they liked other than in native reserves.

When I was in the main survey camp I had discussed with Hibberton a timber proposition. I held that there was much money in marketing the giant magnolia timber, occasional clumps of which were to be found near the headwaters of the Congo tributaries in Katanga, and which grew in great profusion on the edges of the savannahs out west along the Congo-Zambezi Watershed in Portuguese Angola. No one knew of this timber at that time, but I felt certain if we could get it on to the railway it would sell well down in Cape Town, Johannesburg, and the other large cities, all of which imported timber from other countries. Hibberton, who was an exceptionally clever man, gave me some very sound advice in the economic handling of big timber. Timber was about the only thing in the way of natural resources that the Belgian monopolists did not claim they owned.

It was more on Hibberton's advice than on

any one else's that I ultimately gave up Africa, or rather my part of it, the country of the Congo-Zambezi Watershed. Hibberton always spoke to me kindly. He pointed out that I had lived too much alone, and that my forcible and commanding way of talking was resented. He urged me, for my own good, to mix more with white people, and, if possible, to try and make my living in a white man's country. He further told me that I should forget all my troubles in a white man's country.

Sometimes looking back, I begin to see that people did not understand me, and that the misunderstanding was in some measure due to my own faults. I remember well the time when I had started to do the topography of the railway. After telling my boys to shift my camp, I walked over to Hibberton's camp to dine. At eleven o'clock at night I calmly remarked that I was going home. My camp was about 6 miles away. I could not tell to within half a mile exactly where it was. Taking my shot-gun from the boy I had with me, and borrowing a spear for him to carry, I started off through the forest. True, I found my camp that night without any difficulty, but that little incident helps me to understand why the men on the survey party thought me mad. I was not mad, but merely a little different to other people.

My crankiness had taken the form of not allowing any one to contradict or gainsay me, and my hobby of studying economics, and my liking for geography, had developed into a taste of wandering about, no matter whether it was day or night, whenever my work permitted of it.

Possibly I have been luckier than many men who have lived much alone, I knew one man, who had a familiar spirit, called "Dan." He would talk to "Dan" (who, as he apparently thought, answered in return) even when strangers were present. Other men I have known have gone in for morphia, and even worse drugs. Some, through living with native mistresses, have sunk lower than the natives themselves. I have known cases where men have been afflicted with religious mania, or, through living alone, had indulged in the vilest forms of unnatural vice. It is hard to judge such men, for they were living under false conditions, and did not realise that man is a "gregarious cooking animal," and must associate with his own species. Luckily for myself, my crankiness only took the form of a rather arbitrary aggressiveness and random explorations to study geography and economics.

Before going down south I made one bid for fortune. I knew that there must be a lot of work some 20 miles beyond Kinsenda, for there was the only bit of heavy country that the Katanga railway would go through.

I tied my shot-gun to the frame of my bicycle, and also fixed on it a billy-can in which I put tea, sugar, meat, and bread. A native carried the bicycle from my last camp, 4 miles through the bush, to the traction engine road. I cycled up to Austen & Fowler's, sleeping out one night alone in the forest. I proposed to Austen that he and I should go in together and try to get the heavy work that was near his place. However, Austen did not fancy sub-contracting, and considered

that he had enough to do in buying and selling mealies. I thought that I would then try to get the work alone; for I could place my hand on labour, and knew where I could get food for it.

There were some half a dozen white men at Austen & Fowler's. One of them suggested that I should run a residents' protection association at Elizabethville (the Star). His ideas were sound. It was evident that the men who were on their own would need some one to press their demands on the Belgian Government. Every one agreed that Beak, the British Consul, was not the man. Not that there was anything against Beak, but because, since the Prince seemed to have slighted him by not acknowledging his call, his power with the Belgian Administration had completely gone. Besides, too, an officer of the Crown has to do things in a circumspect manner, while an independent man, who voiced the independent opinion of the country, could express himself more or less as he liked.

It was 67 miles along the traction engine road back to my camp. I rode it in one day on my bicycle. Just before sunset I reached a big vley and had about 8 miles farther to do. I did not want to delay and have to travel in the dark, but I could not help waiting in that vley and looking at a sight which I think was unique. I never had a camera with me in Africa, and only for the last few months had I a bicycle of my own. That evening I would have given anything for a camera. The wind was south-east. About 50 yards away from me were a zebra stallion and a bull harte-beeste. They were playing as horses sometimes

play, rearing up on their hind legs and biting each other's necks. I got off my bicycle, and for a quarter of an hour or more watched their fun. I doubt if any man in Africa has ever seen a similar sight. I remained there fascinated till the breeze dropped. Then the zebra got my wind, and trotted off; while the less suspicious harte-beeste put down his head and began grazing.

The next day I started south. Travelling by the staked-out line, I took a last fond look at the big peg that marked the point where the railway crossed the boundary. It gave the exact mileage from Cape Town, and was the zero mark of the first railway in the Southern Congo. Every one of importance, and many an unknown white man, had written their names on it. I did not write mine. To me that peg represented a big question mark in history. The railways from the south would arrive at the Congo-Zambezi Water-shed, and I asked myself which would be the stronger, fancy finance or true economics. Would the first railway to cross Africa be from north to south or from east to west, from the Cape to Cairo or from Beira to Benguela? I felt a great longing to take that peg away with me and to keep it as my only souvenir (other than the map I had compiled) of my Central African experiences.

It was now seven months since the railway builders had come to Broken Hill. The formation (grade) was virtually completed to Bwana Mkubwa mine, and the rails were being laid 95 miles north of the depôt at Broken Hill.

I spent one whole morning with the plate-layers, and watched them put down 1⅜ miles of

rails. The train had its engine in rear. The trucks in front were loaded alternatively with rails and steel sleepers. Gangs of carriers, who passed and repassed each other with the order and discipline of soldiers, bore 33-foot steel rails and laid them either side of the track. A boy with a chain, with bits of red cloth tied to it at equal distances apart, was ahead of the train. Carriers by the hundred laid steel sleepers across the track opposite each mark on the chain. Two gangs of natives shoved the rails into the cavities on each sleeper. The white man sitting on the front truck of the train dropped his long red flag, and the train moved on. He raised his flag again, stopping the train within a few feet of the end of the rails. So it went on the whole morning—three white men and six hundred natives working, and the railway crawling forward at the rate of nearly half a mile an hour. Behind, on a trolley loaded with small iron wedges, came a white youngster with eight natives keying up the loose rails as they went along.

The Americans with all their boastfulness and their "hot air" about their achievements have never come up to the efficiency of the South African railway builders. On a single line they have never laid, even with the aid of machinery and the best labour-saving appliances, more than 4½ miles of rails in one working day. Once the South African railway builders—that was just before the railway reached Broken Hill three years before—put themselves out to see what they could do. They used three trains of material. In one working day of nine hours and thirty-five minutes

they laid 5¾ miles of rails. Medals, each containing nearly an ounce of gold, were struck and given by the head of the firm to each of the twelve white men who carried out this record achievement in railway building.

Business, unfortunately, detained me nearly a fortnight in Broken Hill. During that time—a weary wait—I talked over things many times with my friend Allen, the manager of the African Lakes Corporation in North-Western Rhodesia. He strongly advised me to have nothing more to do with any financial group, whether Belgian or English, that was interested in the development of the Congo. He suggested that I should start on my own and run shooting trips, adding that his people, the Lakes, would help me in every way they could. I did not fancy such work.

Another suggestion that Allen "put up" to me was to go home and marry a rich girl. I laughingly remarked that I did not know where they lived. Besides, I want too much. I have always wanted the best. I said I had drawn up a specification of exactly the type of girl I wanted. "Out with it," said Allen; "it is bound to be interesting." "Well, what I want is this: she must be a lady and a worker and physically my superior. She must be half my own age and seven years older. She must have auburn or golden hair, a fair skin, and blue eyes. A tall, upstanding maiden, either one of my own people or from the northern races of Europe. For her sake it would be as well if she had money." I wonder whether I shall ever find THE LADY OF MY DREAMS!

I spent a week in Bulawayo on my way home. I still had Katanga on the brain, for I waited there to have a talk with Major Wangermee, a Belgian whom I liked and respected and who was succeeding Tonneau as Representative of the Comité Spécial in Katanga. It was on Wangermee's advice that I subsequently went over to Brussels and saw the Belgian financiers.

During that week's wait I stayed at the Palace Hotel, the house patronised by all the outside men in Rhodesia. My friend, Dave Le Page, with whom I had been prospecting west of the Lualaba, in Katanga, was in Bulawayo. He was doing really well with his own two small mines, but he pined for the life of the veldt and the possibility of discoveries which would bring a quick fortune. He told me he knew of a bed of conglomerate (banket) which carried gold and in places might be very rich. It would be a big man's proposition and large capital would be required to work it. Le Page's suggestion, couched in the virile language of South Africa, was, "Will you come out with me and stake veldt? We can sell it to the Rand millionaires." I would have liked the trip, but hesitated because I had so little money. Le Page offered to pay all my expenses and give me an interest. Foolishly I refused. Later on I cursed my folly when I learned that he had found a lot of rich gold-bearing ground and had sold the stuff he had staked for £30,000. Possibly £5000 or £6000 would have been my share.

In England, on my arrival there some three weeks later, I found the Congo atrocity campaign in full swing. One of the missionaries who had

spent some years in the Congo talked things over with me. He was an upright, God-fearing man, but our ideas were radically different. I pointed out that the natives, taking all in all, had actually gained by the Belgian occupation, although I was forced to admit that there were many things which were far from right. I had a knowledge of the conditions both in Angola and in the Congo. I considered that it was far more urgent to stop the Portuguese from devastating vast areas in Central Africa, in their quest for slaves to work in the cocoa islands and on the coast of Angola, than to "sling mud" at the Belgians, who, after all, were doing their best, although their temperament and training utterly unfitted them for the work of pioneer development.

Our Foreign Minister had publicly stated that the Congo as a State had lost every right to diplomatic recognition. Sir Edward Grey's statement meant that raiders into the Congo would not be punished by the British Government, provided that they did not commit brutal acts, and only killed as many Belgians and their servants, black and white, as would be necessary for success in war.

I heard that a raid was being organised in London. Through a well-known and distinguished author I tried to ally myself with the crowd who were in that game. However, the ideas of those getting up the raid, which was a sort of left-hand branch of the Congo Reform Association, were to my mind utterly foolish. Nothing came of their efforts. They wanted to attack the Congo from its mouth and carry out their enterprise under the

guise of a trading expedition. Personally I believe in straightness. A raid is a raid. I suggested that I should get together a good crowd of South Africans and seize the principal store in the Southern Congo belonging to the Anglo-Belgian Intertropical Trading Company. To take this store and others and hold them I wanted a dozen picked white men and fifty reliable natives who could use arms of precision. I should have required between £4000 and £5000 cash to pay wages and to buy rifles and ammunition. Once I had gained possession of the principal store of the Intertropical Company I would have sent out trustworthy and intelligent natives, and through them would have made arrangements to buy the rifles and cartridges of the Belgian native soldiers. These men were then paid 4s. a month. I reckoned that at the start I could buy their arms and ammunition for £15 worth of trade goods per rifle and one hundred rounds, with the possibility of having to pay a higher price later on. Having by these means disarmed the Belgian troops, I would have caught the Belgian officials, put them over the border, and gone ahead. My ideas of a raid did not meet with the approval of the atrocity-mongers, who preferred to make money out of slinging mud rather than by action. I decided to have nothing further to do with them.

I concluded my best course was to go over to Brussels and to see the Belgian financiers. In Brussels I was received with every courtesy. I realised that had I gone over there when I was home two years before that I would have "got in" with the Belgians all right and done good both

to myself and the natives, besides making money for my employers.

The Belgian people felt very keenly the accusations made against them. Sir Edward Grey was very wise when he denounced the atrocity-mongering campaign. He had realised the seriousness of the position. Had the atrocity campaign gone on much longer, the leaders of public opinion in Belgium would have thrown themselves and the Belgian nation completely into German hands, and I honestly believe that an offensive alliance would have been concluded against England, and possibly by now the Germans would have been able to cross the few miles of water that separates them from our unarmed and unprepared country.

King Leopold's secretary, who came of a well-known Belgian family, was most kind, and I liked him very much. He did not mince words in describing what he thought of the campaign against the Belgians.

"Est-ce qu'on vous a donné du nègre à manger aux restaurants ?"

I protested. He followed it up with :

"Mais pourtant vous croyez que nous sommes bien barbares, nous Belges."

I found the Secretary-General of the Belgian colonies a thoroughly good man. He had the highest opinion of Mr. George Grey. We talked of railway building, and I pointed out to him that want of experience on the part of the Belgians had resulted in a great loss of native life, and also that their railways had cost far too much money. I think I showed him conclusively that the South African railway builders, owing to their previous

extensive experience and their superior organisation, could build railways more cheaply and far quicker and at the same time avoid casualties amongst the native workers. The Secretary-General had several vacancies in the lower Congo, but that did not appeal to me, for my whole idea if I went back to Africa was to work in the high tableland of the Southern Congo (where white men can live and rear children) and to play my part for good in the development of the wonderful country of the Congo-Zambezi Watershed, a country which one day will become the home of a white race.

All the Belgians with whom I talked, I found, agreed with my ideas. I did not see the good of telling them that their King had broken every British and International treaty, because I hold it was the fault of the Foreign Ministers of the Great Powers, whose foreman Leopold was, for allowing the treaties to be broken. Nor did I tell the Belgians that they could neither colonise nor administer, and that, if they continued to treat the natives with that strange mixture of weakness and severity under the false economic system which ignorant office-holders in Brussels had originated, they would have such a native uprising in the Congo as would endanger the whole of the white supremacy in Africa. Willingly, and without any hope for reward, I offered to lend a hand in stopping the atrocity campaign so far as to silence calumnies which were brought forward against individual Belgians, whose so-called crimes were largely due to ignorance and want of training, as well as to the bad systems of

concessionary companies and the low wages paid by them. My special article on the opening up of the Southern Congo in *Whitaker's Almanack* of 1910 was written before I went over to Brussels, and expresses my strong opinion that the Belgians were in earnest, and that the greatest good would be served by suppressing the gruesome details (many of them untrue) published by the atrocity-mongers, who, the Belgians considered, were trying under the guise of philanthropy to persuade the British Government to annex the Congo basin.

On my return from Brussels I visited the South African railway builder, who received me with every courtesy. He was building, in addition to the work he was doing for the Belgians in the Congo, another 80 miles of the Benguela railway, which one day, following the Congo-Zambezi Watershed, will join up with the Katanga railway, and thus complete the first trans-African railway from Beira to Benguela. I should have liked to "get in" with the Railway Builder whose great fortune has been won, not by his efficiency alone, but by his having grasped a great economic fact that watersheds in Africa south of the equator are the true routes to be followed in the development of the Sub-Continent.

At the great meeting held at the Albert Hall to denounce the Congo Government I listened to the various speakers, from Morel, the originator of the campaign against King Leopold and his associates, to Sylvester Horne, a great orator, but a man who did not know his subject. Amongst all the men that spoke I only appreciated the

words of the Bishop of Oxford. As I walked to where I was lodging in Blackfriars and saw the wan, mirthless faces of the prostitutes in Piccadilly, and the half-starved, wretched men and women on the Embankment sleeping in the open in the cold of a December night, I wished my Lord of Oxford had been with me, and that I could have shown him that the plight of thousands of our own people was a hundred times worse than that of the most ill-treated native in the Congo. We could see the motes in the Belgians' eyes but not the beams in our own. True charity begins at home.

I talked to the *Times* people. I saw my friend, the British Consul, who was home to undergo an operation. I read of the railway crossing the Congo border and learned with some satisfaction that Bertholet had been dismissed. King Leopold died; but I did not return to Africa. I went to a country where the monopolist cannot have it all his own way.

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